

THE AMERICAN JOURNAL OF CLINICAL MEDICINE

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MAY, 1924

Live and Love and Grow

OPEN the windows of your mind, let your pent soul-
self free

*And gain the power within that hour, a Demi-God to be.
Things you have hoped, have dreamed of long, are yours
if only so*

That you are wise, open your eyes, and let your spirit go.

OPEN the doors that guard your heart, let Love go
out and in,

*Then you will know, "as you bestow, so shall you also
win."*

*The shuttered house is dark and cold, the tethered fancy
slow—*

*Open the doors and windows wide and Live and Love
and GROW!*

G. H. C.

May, 1924.

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The American Journal of CLINICAL MEDICINE

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A Tribute to "The Doctor"

EDITORIAL COMMENT.—The beautiful tribute to The Doctor, which is reproduced in the following, was given at a meeting of the Sapulpa Medical Association, held at Sapulpa, Oklahoma, on March 20, 1924, by Mrs. J. W. Hoover, wife of Dr. J. W. Hoover. The reading of Mrs. Hoover's preachment and appreciation has given us a new incentive to do better work, and still better work, always; to be faithful to our trust; to accomplish our duties in such a manner that our patients may be conscious of a feeling of security, when they can say to themselves: "Luke is with me." This tribute is beautiful. It is also stimulating. It makes one want to live up to the praise that it bestows.

WHEN the Chairman of the program committee called me up, a week or two ago, she told me that the entertainment for this evening was to be in the hands of the women and that she wanted each one of us to think of all the silly stunts and foolish jokes we could. I said, "I'm afraid, the past few years have taken all the joking out of me." I didn't mean it, but it gave her an idea. So, when we women met to make our plans, she said, "I know what I want Mrs. Hoover to do. After our burlesquing is over, I want her to give a real tribute to 'The Doctor.'" The suggestion met with general approval. But, the days went by and, somehow, my speech wouldn't come. The tribute was in my heart, but my brain would not form the thoughts for my lips to speak.

You know, there are a lot of people who have one-track minds. They can only think of

one thing at a time. Well, I have a mind like that. Outside of the daily round of my home duties, I think of only one thing—and that is, that Sunday-School Class of mine. And it was along that line of thinking that my speech came.

One afternoon, a day or two ago, I turned suddenly to Dr. Hoover and said, "I have my text." "Your what?" "My text around which I am going to weave my tribute to 'The Doctor.'" "What is it?" "Only Luke is with me." He thought a moment, probably going back in memory to his boyhood Sunday-School days, and finally said, "Yes, you have." Perhaps I shall have to ask some of you to go back in memory to your boyhood Sunday-School days in order to get the connection.

The Apostle Paul who, next to our Lord and Saviour, Jesus Christ, has most molded and influenced Christian thought and Christian

living, had a great handicap and a great compensation. Paul had a "Thorn in the Flesh." Just what that was—whether it was occasional periods of acute suffering or nagging, dragging daily pain, we do not know. But, whatever it was, it was so great that he prayed repeatedly that God would remove it. God did not. He does not always remove our "Thorns in the Flesh." You know how a pearl is formed. It is a grain of sand, an irritation, a hurting, that gets inside the shell. The oyster cannot possibly get it out. So, it accepts it and out of it makes one of the most beautiful things in the world—a pearl. Perhaps it is God's purpose that we accept our thorns in the flesh and, through them, make of our characters beautiful things.

But Paul had a great compensation. God did not answer his prayer in the way he wanted Him to do, but He gave him the physician, Luke, to be his companion. And, when Paul made those great missionary journeys of his, carrying the wonderful Gospel of good news through Syria, Asia, across into Europe, Macedonia, Greece, Rome and perhaps clear across into Spain, he had, as his constant friend and companion, Doctor Luke who strengthened him, guarded him, watched over him, cared for him through days of weariness and nights of suffering. Who knows how much the world of Christian thought has gained, and who knows how much the world of Christian thought might have lost, had not the Master given to Dr. Luke the commission, "Take care of this body that is being broken for Me."

And so the long years went on, and the last wearisome journey is done, the end has come for Paul. Nero's prison walls shut him in. Nero's legionaries are outside those walls, and just a little farther on, a few days, a few hours perhaps—the martyr's death. As he sits there in his prison cell, writing the last words that were to come from his mighty pen, it was with him as with his Master—all had forsaken him and fled. All? No, not all. For, when he writes that last message to Timothy, he adds "Only Luke is with me." Of course, Luke was with him. Have prison walls, have Nero's legionaries, has even a possibility of a martyr's death ever mattered to a physician when his patient needed him?

Modern Lukes

There died in Washington, not many weeks ago, a very great man; some of us think one of the few great men of the world. When he entered his first presidential term, his intimate friends said, he could not live through

it. But, there went with him a quiet, little-known, unassuming man who so strengthened him, guarded him, watched over him, cared for him, that he not only kept him alive but gave him a body so nearly well that he was able to endure all the terrible days of that dreadful war and the perilous times that wrecked the strongest. And when the strong man himself was laid low, it was Dr. Grayson who took the broken body and eased it to the end. Whenever the intimate, personal life of Woodrow Wilson is written, running through it like a thread of gold will be the faithfulness and devotion of Dr. Grayson. Yes, President Wilson had his Luke. Thank God, we common people, who walk the daily round of commonplace lives, we too have our Lukes.

Oh, you doctors, "you cannot have too deep a consciousness that yours is a holy calling and that you are disciples of the saving Christ; prophets and soldiers of the kingdom whose dominion is health and joyous life and whose reign is cleanliness and self restraint. May God grant that never one of you, through pressure of need or ambition, lose the sense of your divine mission and become hirelings who serve only for money."

How we depend upon you, depend upon your patience, your gentleness, your knowledge, your skill. How we rejoice at the daring with which you are tracking down the slayers of mankind by the great white light of science. How we drink in hope, strength and vitality from your very presence and how you forget self in hastening to our needs! "And none of the ransomed ever knew how deep were the waters crossed, nor how dark was the night that our Lord passed through till He found the sheep that was lost." And none but the doctor ever knows how deep are the waters crossed, nor how dark are the nights and how dangerous the ways he travels when he goes to the call of suffering humanity. There be many of life's wine-presses that must be trod alone; but, how many of those lonely vigils are shared step by step by the doctor at our side!

The way of life is rough and steep.
Yet, a woman climbs it alone,
From the cradle's side
To the last dark ride
That is crossed in the arms of sleep
Alone!—but, the Doctor's there.

The courts of pain exact their toll
While the gates of Life swing out
From the spirit land
To a mother's hand

¹From a prayer for the doctors and nurses, by Walter Rauschenbusch.

Comes the gift of a new-born soul.
Alone!—but, the Doctor's there.

A mother sits with tear-dimmed eyes
While her boy faces shot and shell
In a war-torn land,
Till his last brave stand
When he falls on the field, and lies
Alone!—but, the Doctor's there.

An outcast falls by the wayside,
Despised and neglected by all;
In our human faults,
Humanity halts
And leaves us our sorrows to hide
Alone!—but, the Doctor's there.

—H. C. BENNETT.

And, as Christ, when the woman broke her alabaster box of precious ointment and anointed Him for His burial, could say, "wherever the gospel is preached in the whole world, this shall be told as a memorial of her," so Paul might have added, when he wrote that last message to Timothy—When ever these words shall be read all down the ages, may this tribute also be read to the faithfulness and devotion of the doctor—"Only Luke is with me."

People seldom improve when they have no other model but themselves to copy after.—Goldsmith.

THE DOCTOR'S BUSINESS METHODS

In this issue of CLINICAL MEDICINE (pp. 295 and 340), we print two communications from business men who, in the course of their work, come in constant contact with physicians and who have, in course of time, formulated certain ideas that they here put in the form of concrete suggestions tending to improve the financial standing especially of the general practitioner.

One of our contributors is credit man of a manufacturing chemist's firm, the other one is a manufacturer of and dealer in x-ray and electrotherapeutic apparatus. Both evidently know what they are talking about and the suggestions of both merit careful consideration.

Mr. Plummer informs us that he will be very happy to reply to definite questions—to act as financial consultant, as it were; and we feel certain that both gentlemen are honestly desirous of aiding as much as lies with them their good friends, the doctors, to get as good a financial return out of their onerous work as it is possible.

There is really no reason why we physicians should not devote more attention to the business side of our calling than we do. The plea that we are professional men and that our

great idealism, our intense love of humanity, our earnest desire to benefit the sick portion of mankind prevent us from stooping to the "sordid" business phase of our honorable calling—that plea is not justified. For, after all, physicians have needs and requirements of a very earthly nature. They must buy clothing and food and coal and gasoline; they must maintain a certain standard of living, they must purchase equipment, which means financing their "business," to a greater extent than ever before. Moreover, since physicians usually marry rather early in life, family cares devolve upon them. In short, they have thrust upon them financial duties and obligations that they can meet only from the monetary returns of practice.

There is no sense in sweating blood to meet one's debts, and then to let Dick, Tom and Harry and Susie and Ann and Kate get away with their hard-time stories and either forgive them their debts outright or make a substantial reduction, thus working for them at a loss. No sort of a hard-time story will enable the physician himself to get out of meeting his own obligations.

Besides, as Mr. Plummer points out, those same people who are too poor to pay the doctor often live better than he does, they wear better clothes, they indulge in more expensive amusement, they drive better cars. They pay for all those things. Then, they can pay the doctor.

Furthermore, the doctor who has a family, who has given hostages to fortune, has no right to deprive them of advantages by being foolishly and fatuously generous to patients who do not deserve it. In the case of real, honest-to-goodness need, where legitimate reason exists why the doctor should offer and extend his services gratis, we do not have a single objection to offer. However, we claim that the actual, real charity cases are relatively few and that most of the bad debts are bad because the doctor does not insist on being paid.

Let the doctor be prepared to render good service and *let him put a proper value on that service*. Then let him send in his statements promptly and regularly, as suggested by Mr. Plummer. On first making a change in this direction, his efforts may be greeted with a howl on the part of those with dead-beat tendencies. His honest clients will soon see the justice of the position. In the end, both, the patients and the doctor, will be the gainers.

We hope that we have stirred up something real, something productive of good in print-

ing these two articles and we trust sincerely that many medical practitioners who now groan under an intolerable financial burden may thereby be enabled to get their heads above water and to swim toward financial security and ease.

Just a bit of personal experience which any of you duplicate, no doubt, and which illustrates one of my points: A good many years ago, I was called upon to render service in a family where the means were rather restricted. On visiting the post office, I was asked concerning the matter by the post-master-store-keeper-undertaker-leading-citizen of the village. You of the country know, of course, how these things are. The gentleman said, "Doctor you will have to be quite lenient with these people in your charges, won't you?" I replied: "Mr. Grocer, I will give them three-dollars' worth of medical services free of charge for every one-dollars' worth of groceries that you donate to them." My bill was small. I never heard of the grocer having made a donation. Funny? Surely—not.

Take a walk to refresh yourself with the open air, which inspired fresh doth exceedingly recreate the lungs, heart and vital spirits.—Harvey.

"MEDICAL TRAINING"

The letter from J. C., Kansas, appearing on page 339, of this issue of *CLINICAL MEDICINE*, came from a physician who, some years ago, requested our aid in the way of suggestions for postgraduate and private study, so as to enable him to fit himself the better for the exercise of his calling. It is a truism that medical training does not cease with the granting of the doctor degree or of the license to practice medicine: It really commences then in good earnest. All that preceded was only preliminary.

J. C. was disappointed in his teachers in the postgraduate school. He missed the needed guidance in selecting those studies that he really required, and then he found that his teachers lacked the ability to impart their knowledge to their physician-students, to make them see things in their interrelation and to receive the practical benefit from their postgraduate studies. Among all the professors and instructors whom J. C. met, only two proved to be real teachers in the sense that they actually benefited their pupils.

It is unfortunately true that there are a great many shining lights, great scholars, successful clinicians, brilliant surgeons, and prominent specialists on the faculties of medi-

cal schools including postgraduate institutions—but of whom only a small proportion are really good *teachers*. It is not only the possession of knowledge that makes a successful teacher, it requires either the ability to impart, to pass on that knowledge, or a more painful but, in the end, more successful way, namely, the ability to force the pupil by skilful suggestion, strenuous questioning and forceful guidance to dig out the facts for himself, to correlate them through his own initiative and to employ the basic knowledge he possesses for explaining phenomena that he may observe and thus to build and develop a system of treatment—therapeutic, palliative, prophylactic, whatever it may be, that will prove successful in actual practice.

The more we think of it and the more we talk it over with other physicians of the older school, the more we are impressed with the fact that, among the preceptors of old, the best clinical teachers were to be found. Undoubtedly, they often were shy on theory. But, they had learned the secret of practice. They were able to associate symptoms, they had acquired the ability to read the pathological phenomena of the sick body and the sick mind. They knew their patients intimately and, under their guidance, their pupils acquired the useful lesson of personal medical service.

True, science is necessary for a real understanding of clinical symptoms. That science, though, is of little use, if it consists merely of a heterogeneous collection of dissociated, scattered facts. The various facts must be explained in their possible bearing upon signs and symptoms that are observed at the bedside. Or, at least, the student must be guided and instructed to develop that explanation himself. It is only the practical application of scientific information that renders it of value. In the end, all medical theory has only one purpose: that of making possible the work of medical practice. Unless medical theory can be so applied, it has no basis for existence, it has no right to be.

There is not only need for institutions for the training and educating of physicians, there should also be institutions for the training of teachers, and these teachers are especially needed in postgraduate schools. They should be practical men with wide actual experience, both in the wards and in private practice, and they should be capable of passing on their knowledge in such a manner as to enable their pupils to grasp it and to develop it further for their own needs.

THE DIAGNOSIS OF NEURASTHENIA

The subject of Surgical Problem No. 15, submitted in the Surgical Seminar for March, forms the topic of discussion in this month's Seminar. I do not desire to add to the Seminar discussion, which I have only just had an opportunity to see, but I am anxious to make some comment that affects this inquiry more or less directly. I refer to the habit of many of our colleagues to offer the diagnosis of neurasthenia when a more or less cursory examination of the patient (especially if this unfortunate be a colleague) has proved the problem to be rather difficult and impossible of immediate solution—impossible of solution without a great deal of thought and investigation.

I am reminded of a very bright young Chicago physician who passed away only a few weeks ago and who had attained a very enviable reputation, although only a young man, because of the grim determination with which he had overcome his serious physical handicaps in order to gain first a general, then a medical education. He was a diagnostician of note and, unfortunately, of a neurotic temperament.

A few months ago, he asked me to call on him, as a friend. He was then staying in a health resort because of a general breakdown. He told me that he had consulted several noted diagnosticians in Chicago, most of whom had blandly informed him that his trouble was about five percent heart and ninety-five percent neurasthenia. He died. The five percent heart disease, consisting in a terrific decompensation, auricular fibrillation, etc., etc., proved too much for the ninety-five percent "neurasthenia."

As Blech tells us, he has been called a neurasthenic. I have had the same diagnosis thrown at me. I recall several patients, some of them with surgical experience and quite able to give beautiful "organ recitals" whose persistence of symptoms was designated as neurasthenic by their surgical attendants. These gentlemen are prone to indulge in a superior smile when told of the opinions of the medical attendants and to suggest, as one of them did recently (a mighty good surgeon, too, but, as an internist, I would not care for his opinion): "Your doctor takes you very seriously, doesn't he, Mrs. Blank?"

Now, are we not altogether too ready to solve our difficulties by the easy diagnosis of neurasthenia when the problems submitted by our patients involve a great deal of thought,

much searching observation and investigation, before we can state definitely that there is, or is not, a physical basis for the symptoms complained of? If may not be possible to associate the subjective symptoms with objective signs that we could demonstrate. In other words, physical examination may be unsatisfactory insofar as it does not produce any definite results. And, yet, does it not happen frequently enough that there are objective abnormalities existing that can not be discovered with the palpating or percussing finger, with the stethoscope, or even with the x-ray? Urinalysis, examination of the feces, of the expectorations, of the gastric contents, of the blood, they may all leave us unsatisfied insofar as any irregularities that are discovered thereby are not sufficient to account for the symptoms. In that case, is a diagnosis of neurasthenia justified?

The meaning that we ordinarily associate with neurasthenia comes very close to what we used to pass off as hysteria; meaning that the patient suffered from something that did not exist and for which Coué, Christian Science, New Thought, or, still better, plain common horse sense and hard work were the best remedies. What is neurasthenia, anyway? Dorland defines it as:

"Nervous prostration; a nervous disorder characterized by abnormal fatigability. The name for a group of symptoms resulting from some functional disorder of the nervous system, with severe depression of the vital forces. It is usually due to prolonged and excessive expenditure of energy, and is marked by tendency to fatigue, lack of energy, pain in the back, loss of memory, insomnia, constipation, loss of appetite, etc."

There you are. It is "some functional disorder" which produces certain definite and insistent symptoms but for which a physical basis can not always be found. Yet, in spite of the contrary opinion of surgeons, pathologists, bacteriologists and all other laboratory workers, we internists know mighty well that many afflictions that are "merely functional" make their victims severely ill and tax all our ingenuity and knowledge to correct.

I do not object so much to the diagnosis of neurasthenia being used, providing that it be made with a full understanding of what it means. If the diagnosis is given with the mental reservation that it means something that doesn't exist, then it is a lie pure and simple or a makeshift, or it is tantamount to side-stepping responsibility, to betraying the patient's trust.

Every single patient who consults us for reasons of ill health is entitled to our best

efforts. If we are not willing to give those, the only honest thing to do is, to refer the patient to somebody who will do the right thing.

Here, incidentally, is a difficult problem, namely, that of the so-called and alleged professional courtesy. Time and time again, physicians have told me that they wish they could consult certain ones among their colleagues and *pay for their services*. Some have resorted to the simple expedient of going under an assumed name and without using their doctor title, paying fees cheerfully and getting diagnosis and services in the ordinary course of events. Our custom, our professional courtesy, demands that we treat our colleagues and their families gratis—for nothing: And that is what they usually get.

I have no objection to extending such professional courtesy; in fact, I like to do it. I consider it a compliment, if one of my colleagues, who, after all, can pick from among all the physicians in town, honors me by requesting my services, either for himself or for a member of his family. If he didn't think that I could deliver the goods, he wouldn't ask me, would he? There is no reason in the world why he should, excepting the one that he thinks I can help him. Still, it must be conceded that, in the case of certain medical men of high standing, the requests for professional courtesy, the demands on their time, entail so much effort and expenditure of time, even of money sometimes, as to become burdensome. Even the great in the land are human, and one can understand, if not excuse, that they may be subject to human limitations and human makeshifts. In such an event, it may easily happen that a diagnosis of neurasthenia is made offhand when it would not be ventured if a really searching investigation of the patient's physical, nervous and mental assets and liabilities were made. All this, though is a digression.

What interests us here is the diagnosis of neurasthenia. First of all, it should not be made offhand, nor without mighty good cause. Then, it should never be made when the intent is to suggest that the patient is a malingerer, or that he imagines himself ill. If the diagnosis of neurasthenia is made, it entails a lot of careful treatment, a long period of observation, a rather more than ordinary degree of devotion on the part of the medical attendant to his patient in order to enable the latter to overcome his handicap. Truly, neurasthenic patients are among the most worthwhile and the most grateful clients that a conscientious

physician can have. Neurasthenia is nothing to be sneered at, it is hell, pure and simple. A neurasthenic patient who realizes that his physician makes and continues to make every honest-to-goodness effort that is in him to help him (the patient), appreciates these efforts and, if he be dealt with fairly and be treated as an intelligent patient, he can even be told of the physician's fears, if they exist, as to the "imaginary" nature of some of the symptoms—the patient will not resent it, he will do everything he can to cooperate with his physician.

Here comes another thing, and that is the really useful and worthwhile method of treating our patients. When a patient consults me on account of illness, I actually consult with him, providing that he be of at least a moderate degree of intelligence, and inquire carefully into his own views and ideas regarding his case. Many times, I have received valuable hints that aided me in solving my problems the more readily. This, however, is another story.

Time magnifies everything after death; a man's fame is increased as it passes from mouth to mouth after his burial.—Propercius.

THE PHYSICIAN'S HOME

In years gone by, CLINICAL MEDICINE and its predecessor, THE ALKALOIDAL CLINIC, printed various articles dealing with the problem of a physician's home. For this reason, we are much interested in a communication from Dr. Robert T. Morris, of New York City, which appeared in the *Medical Review of Reviews* for February. According to this communication, the physician's home is an established fact, even though, so far, it is only a beginning. The movement is worthy of all support which, we trust, can be secured from physicians and from their grateful patients the country over. In the following, we reproduce Doctor Morris' account, which explains itself.

There are homes for the aged and the otherwise unfortunate belonging to various trades and professions. The medical profession has been left out until very recently.

A popular conception of the physician includes the idea that somewhere or somehow he is sure of having the comforts of life and that in his declining years or when incapacitated by illness he may depend upon friends or relatives. This feeling is practically universal because the fact is practically universal. On

the other hand, when we realize the number of thousands of physicians in this country, almost anyone who has collected statistics of any sort would be ready to believe that a certain percentage of physicians are in need of care on the part of their colleagues when misfortune overtakes them.

Doctors fight a good deal among themselves because they are idealists and because each one is jealous of anyone else who renders better service to the public than he himself can render.

When an appeal for sympathy is made to the physician, however, an entirely different psychology shows itself. No one springs to the aid of the unfortunate more quickly than does the physician, not only because of his training but because of the fundamental characteristics which led him to take up medicine as a matter of choice when choosing a life occupation.

The Physician Home idea originated with a little group of doctors in New York City, but with the catholicity of view belonging to members of our profession they promptly planned to have the Home movement one of national scope. The first unit has been established in the State of New York, but that means only that it is to serve as an object lesson. Other units will be developed as rapidly as physicians awaken to a realization of the need for this sort of benefaction. There has been a fear perhaps that men or women physicians who were just over the line from the group engaged in responsible practice would be the ones to make application for help. We understand that such is not the case. We are told that almost all who apply for admission to the Home are physicians who have been engaged in good practice but who have been so generous during their life times that little has been put aside for a "rainy day." Some of them are now becoming blind or have suffered crippling injury or have outlived their relatives and still have been too proud to ask for assistance. This is the class that is said to furnish the group now asking for care at the Home.

Out of three or four doctors who are now waiting for admission as soon as sufficient funds will allow, there is one who is widely known for advance work but he is now well past eighty years of age, struggling along on a tiny income. Another one who is waiting has become blind and his faithful wife of excellent social position has been obliged to take up ways with which she is unfamiliar for supporting him. Another one nearly eighty years

of age, who was a teacher at one of our medical colleges, a rare character and a genius beloved by his intimates, is now being supported by them although none of them are under the slightest obligation excepting that of friendship. This then gives an idea of the need for hearty response on the part of our profession in the interest of the Home where a good many of us perhaps have felt we might have to go some day.

The first unit of the Home consists of a large farm property given as a memorial to his father by Dr. Stephen V. Mountain, of Olean, New York. Funds contributed by members of the profession have been employed for developing the buildings suitably and for arranging for comfort so that physicians may feel really at home. The institutional feature to which doctors would not readily adapt themselves has been made as small as possible.

Dr. Robert T. Morris is President of the Home, Dr. Ralph Waldo, Vice President, Dr. Albert G. Weed, Treasurer and Dr. Silas F. Hallock, Secretary.

The Home is non-sectarian. Any legally qualified member of the profession who has been engaged in practice may enter and his wife or young children may go with him if he and they are in distress. None of the officers receive any salary whatsoever. Although busy men, they have given time and their own money to furthering the project. Such being the case, it seems to us that it is up to the rest of the profession to lend a hand either by becoming annual contributing members for \$10.00 per year or by taking up other forms of membership which include larger donations. Members of the profession also are expected to ask grateful patients and other laymen, grateful, ungrateful or indifferent, to remember the Home in their wills. Correspondence relating to the Home may be directed to any of the officers but preferably to the Secretary, Dr. Silas F. Hallock, of 901 Lexington Ave., New York City.

ROBERT T. MORRIS, M. D.

New York City.

Flowers are the beautiful hieroglyphics of nature, with which she indicates how much she loves us.—Goethe.

WHAT OF PACIFISTS AND PACIFISM?

A few weeks ago, we were more or less disturbed and not a little disgusted through some occurrences among the students of Northwestern University, in Evanston, Illi-

nois, where there appears to be a small coterie committed unconditionally to an absolute devotion to pacifism and no less to an outright refusal to take up arms even in defense of our country, if this should be attacked wantonly by an enemy. It is impossible to conceive of any war that would involve us for any other cause. For, certainly, we should never attack any other nation at our own initiative merely for the usual political and diplomatic reasons that ordinarily serve as apology for making war.

It appears that these youths in question have pledged themselves to obey strictly the principle of non-resistance under all circumstances; to refuse to take up arms in the defense of their country, or to do anything that would promote or support such defense. Even for the protection of the flag, the symbol of our national consciousness, they would not raise a finger if doing so would necessitate fighting.

War is archaic, we are told, barbarous, criminal, futile and wholly unnecessary; and those infants actually believe that they have told us something new. We have heard the same thing in the course of the last ten years iterated and reiterated by mawkish and blatant poseur-pacifists who describe loudly and frequently how terribly the war and all its attendant evils had depressed them and how they hated it with every fiber of their being. Quite so. Only, we can not quite see that there is anything unusual or anything unusually meritorious in those sentiments. We, too, hate war with every fiber of our being. We, too, felt depressed, terribly depressed—we felt ill with our depression. At the same time, it seemed to us most effective to help all we could in putting down the war by means of armed intervention; and that was the position of our government.

The two opposing varieties of pacifists are described by Henry DeMan ("The Remaking of a Mind") as "those lovers of peace who were not afraid of fighting for the realization of their ideals," and "those bleating lambs in a world of ravening wolves" who, adhering to the gospel of non-resistance, simply refuse to take up arms, no matter what the provocation. He refers to "the exponent of active pacifism. Bertrand Russel ("Why Men Fight") who describes this class of people as "those whose impulsive nature is more or less atrophied."

Most certainly, we believe that war is a crime and preventable. We even admit that it is the duty of all civilized governments to act in agreement with the desire of their

various nationals which is, to make a future war impossible. However, if our country is invaded, if our flag is fired on, we shall resist and encourage resistance just as energetically and whole-heartedly as would the citizens of any other country resent indignities offered to their flags.

It has been asserted that the gospel of non-resistance and the unwholesome, pernicious epidemic of mawkish pacifism that is afflicting some of our ill-balanced youths, is really inspired and prompted by communistic propaganda. It may be so; we do not know. Certain it is that the Anglo-Saxon idea of what is right and just and decent does not include a whining, slobbering yielding to aggression, but it means rather the licking the enemy into good behavior. Even a man of peace may resent unjust aggression. We are reminded of one of Cooper's Leather Stocking Tales in which a Quaker falls in with the trapper and his Indian friends and goes through a struggle with the Indians. The Quaker had refused an offered musket on the plea that he was a man of peace (which, it may be noted is something better, finer, more dignified than being a pacifist). As we remember it, the story goes that, during the struggle, when the red skins attempted to take the barricades, there was heard a remark something like this: "Friend, we do not want thee here." And this assertion was reinforced by a blow with a club or a bullet fired from a pistol, we forgot which. At any rate, that Quaker was the true kind of a pacifist. He resisted war and made it impossible for his opponents to continue.

To be ready for war is a wonderful deterrent against aggression by others. *Si vis pacem, para bellum.* (If you desire peace, prepare for war.) Here is a truth that has been pronounced many centuries ago, and it is as true today as it ever was.

Health is so necessary to all the duties as well as pleasures of life that the crime of squandering it is equal to the folly.—Dr. Johnson.

DENTAL PROPHYLAXIS

A special article appearing this issue of CLINICAL MEDICINE (p. 303) deals largely with the merits, or demerits, of dentifrices as they are produced and utilized for the purpose of keeping the teeth clean. Great stress is laid, in this country, upon the mighty power of the tooth brush as a potent agent for preventing tooth decay and all its attending ills. We believe, we are correct in saying that, in no other country, is so much care devoted to

the teeth as in ours and nowhere else is the dentist visited so regularly as he is here. That is probably the reason why "ill-furnished" mouths are seen comparatively infrequently in America, while they are very frequent elsewhere, for instance in England, in the Scandinavian countries and (we are told) in post-war Germany.

And, yet, *American Medicine* quotes Dr. Harold Cross, director of the Forsyth Dental Infirmary for Children, to the effect that 96 per cent of American children possess defective teeth, while 96 percent of the children arriving in America from the southern parts of Europe have sound teeth. Pretty soon after coming to this country, though, these sound teeth show signs of decay and our immigrants, as well as their progeny, are no better off than we are and are equally in need of dentists' aid.

Sound teeth are observed in countries and in districts where the food is simple and nutritious and where the conditions making for deterioration of the constitution are not existing or are slight. It is our conviction that tooth decay is not prevented by brushing the teeth and by the use of no matter what dentifrice, but rather that it depends upon constitutional disturbances. In this we are fully in accord with the editorial writer in *American Medicine* (March). He says:

"Good teeth are determined by the constitutional organization of the child and are not dependent upon the toothbrush. Caries develops regardless of daily cleansing because the development of teeth is dependent mainly upon prenatal influences. The adequate diet of the pregnant woman, so that it contains milk and the leafy vegetables, as well as other sources of calcium, phosphorus and other mineral constituents, is of far greater protection against decay than dependence upon the toothbrush during the years after birth. Hence it is patent that the field of preventive dentistry is not limited to the types of service offered to school children, but must be included in the public health service, such as is practiced in prenatal clinics. The reparative phases of dentistry can cope with the needs of school children and can check the destructive processes. Reparative dentistry, however, has thus far shown itself unable to control or, indeed, decrease dental decay as it presents itself among children entering upon school life."

In our enthusiasm for toothbrushes and all that they imply, we are in danger of forgetting what lies behind the decay of teeth. We forget that the atrociously "refined" food articles that manufacturers foist upon a supine public

are responsible, among other things, for caries of teeth as they are for so many ailments that have become almost national characteristics. Since it seems impossible to induce the manufacturers to give us more wholesomely-prepared foods, would it not be feasible to find a way out by boycotting these articles that really are not wholesome and limit our diet to foods as they grow on the hoof and in the ground and without having their strength and their useful constituents "refined" out of them? A return to normal feeding would, in the course of years, lead to a marked improvement in our general health and would greatly benefit the coming generation. A change in our national dietetics, in our habits of eating, is urgently called for. Commonsense should prevail here as elsewhere.

Ignorance is not so damnable as humbug; but when it prescribes pills it may happen to do more harm.—George Eliot.

LOBELIA IN THE TREATMENT OF TETANUS

The report, by Dr. G. M. Fisher (this Journal, April, p. 263), of his good results in nine out of ten patients with tetanus treated with lobelia, brought him numerous letters, asking for further particulars. Doctor Fisher informs us that it is quite impossible for him to make personal reply to all inquiries and requests us to give the main points of information.

Most of Doctor Fisher's doctor correspondents want to know whether the tincture or the fluid-extract of lobelia was called for. He gives the tincture of lobelia with the fats, inorganic constituents and resins excluded. The first three doses must be given at hourly intervals. So far, Doctor Fisher.

It seems to us that, in a case where prompt medication is required and the function of deglutition is greatly interfered with, as is the case in tetanus, the hypodermic method of administering relaxing drugs is far to be preferred. Personally, we should select the alkaloid, lobeline sulphate, in preference to either tincture or fluid-extract. The antispasmodic effect of lobeline sulphate is very marked after hypodermic injection. A dose of 1/200 grain, which may be repeated as demanded by the persistence of the symptoms, will produce a profound relaxation.

It must be kept in mind that, in all probability, it is not *curative* in the sense of having a specific antitetanic action. That is to say, it does not act as an antitoxin by neutralizing the tetanus toxin. However, it

promptly overcomes the spastic effect of the tetanus toxin by relieving the spasms of the muscles and by soothing the irritation of the nerves. The tissues then have an opportunity of producing their antitoxin and thus overcoming the consequences of the poisoning.

Lobelia is a very powerful antispasmodic, as anybody can determine by taking a dose himself. We have no doubt about its favorable influence in a case of tetanus.

He who has no opinion of his own, but depends upon the opinion and taste of others, is a slave.—Klopstock.

RHUS POISONING

There is before us a letter from Dr. A. Clement Shute, of Pottstown, Pa., who refers to Doctor Bovee's remedy for rhus poisoning, mentioned on p. 263 of the April issue of *CLINICAL MEDICINE*. Doctor Shute says that a few leaves of the poison ivy chewed and swallowed will make your system immune to the local effects of the vine—surely an easy way to avoid the pest. Personally, he must take a few leaves each spring and then he experiences no discomfort at all that season. Otherwise, he would be tormented sorely. Doctor Shute relates that the section bosses have all their workmen eat the leaves as do also the foremen of the employes in the Philadelphia city parks.

This suggestion is very excellent and reminds us of an article contributed to *CLINICAL MEDICINE* for September, 1916, (p. 753), by Dr. J. M. French. Doctor French quotes a friend of his, a homeopathic practitioner, to the following effect:

"Some thirteen years ago, there lived, almost directly across the street, . . . a man who was foreman of the construction-gang of the Milford and Uxbridge Street Railway Company. This force consisted of about 150 Italians. Every summer, he told the writer, the efficiency of his force was seriously impaired by an average of at least 10 or 15 men being off duty daily as a result of ivy poisoning. Every man of them feared the ivy as he would an evil spirit. He was told that he need have no more trouble from this source.

"How can I avoid it?" he asked.

"The answer was, 'Teach them to eat it.'

"The specific instructions were as follows: When you go where you see the ivy growing, look for a tiny young leaf; pick it and eat it; then go about your business and forgot it.

"Some two years later, the foreman of this gang of workmen was asked one summer's

day, 'How many men are off duty today as a result of ivy poisoning?' His answer was, 'not one.'

"How do you avoid it?" he was asked. 'Every mother's son of them eats it,' he replied. The writer has asked him the same question at intervals of two or three years, receiving the same reply, the last time being about two years ago.

"Being a good deal interested in this subject and having a high regard for my homeopathic brother, I thought this was worth following up. And, so, this very afternoon on which I am writing this, while traveling on the Milford and Uxbridge Street Railway and chancing to meet thereon the foreman above spoken of, I engaged him in conversation, told him of the two papers referred to and asked him for his version of the matter.

"Without any hesitation, the man gave me a substantial confirmation of the statements of Doctor Coffin, the physician whom I have quoted. In somewhat more detail, he told me how he himself had followed the doctor's directions when suffering from the effects of the poison, and thus had experienced prompt and lasting relief. He took but one of the three leaflets of the rhus, chewed it up and swallowed the juice. It cured him. His men followed suit, with the same result. One man was a doubting Thomas, and it was hard to persuade him to eat the leaves—but he did and was cured."

This article was followed up by another one, in *CLINICAL MEDICINE* for April, 1917, (p. 306), in which a report appearing in the *New York Medical Journal* was reproduced and that was virtually to the same effect.

There is a homeopathic trituration of rhus which is dispensed in the third potency and higher. It would also be a simple matter to prepare an extract of the rhus leaves, on the principle of other biologic remedies, for *parenteral* introduction into the body, for the purpose of overcoming the existing hypersensitiveness to the protein irritation by rhus. It is to be kept in mind that not everybody is poisoned by poison ivy. Some people can handle it without paying for their hardihood.

What is to us of particular interest in this observation is the fact that the hypersensitivity to the rhus toxin is overcome by the *enteral*, not *parenteral*, introduction. This is, in a way, in support of the views held by many that biologic remedies *may* be useful even if given by mouth and not *parenterally* as it is claimed to be necessary by other scientists. We refrain from further comment on the question in this place, merely wishing to record the point.

Leading Articles

Collection Problems of the Physician

By R. L. PLUMMER, Chicago

WILL those physicians who have trouble collecting their accounts please stand? Thank you! The gentleman on the extreme right who remains seated doubtless has a broken leg or has not yet had a patient. If the assembly will now resume their seats, the "professor" will proceed.

There is, perhaps, no problem confronting the practising physician that is a greater source of annoyance than the matter of collecting his accounts. Having spent from six to ten or twelve years in preparing himself for his chosen work in life, he is presumably fitted to cope with the problems that arise in a professional way. His reliance upon himself as a practitioner increases as the years go by, and he is successful in winning the confidence of the community in which he has chosen to build up his practice.

The unfortunate thing is, that, with all his training in his profession, his training as a business man is entirely overshadowed and overlooked. As a consequence of this, a very large number of physicians suffer in a financial way. Fully 75-percent of the difficulties experienced by the physician arise from his lack of business training and the resultant carelessness in looking after his collection and other matters of financial interest. It will be the purpose of the writer to inspire the doctor with the determination to look after his business interests as well as his ethical interests, and to suggest to him ways and means of doing so.

The Doctor's Own Financial Obligations

The doctor must uphold the traditions of his profession, maintain his family, and keep up appearances to correspond with the position which he usually holds as a professional man in his community. It is, perhaps, an unfortunate thing that a great many people look upon the physician as a prosperous person of importance in his community, little realizing that his living and the maintenance

of his family depend entirely upon the collections which he makes for his services. Because of this attitude towards the professional man, he himself has perhaps been mistakenly imbued with the idea that it is beneath his professional dignity to handle his collections in a businesslike way. As a result of this, there is probably a larger amount of complaint among medical men about poor collections, hard times, and people not having any money, than from any other source.

The physician may handle his business matters in a businesslike way without in any way reflecting upon himself. The butcher, the baker, and the electric-light-maker in every community must be paid, and the physician is not shown any consideration over the rest of the people when it comes to meeting his obligations to the people who serve him and his family. If he owes a bill to the clothing store or to the dressmaker, or to any of the other numerous sources which are common to our everyday life, he must meet these obligations with a reasonable degree of promptness, and it is common sense to reason out that he in his turn should require that people who owe him accommodate him likewise when it comes to paying their bills.

Physicians Should Use Business Methods

The successful business man, about the first of every month, sends out his bills and statements to his customers, indicating the terms on which he has sold the goods and asking for attention. Many physicians unfortunately neglect this very thing and, as a consequence, immediately slow up their collections by leaving it entirely to the debtor to come in and pay whenever he good and well feels like it. It should be the policy of every professional man to arrange to have statements and follow-up correspondence go out every month on his accounts. When he has taken care of a case and his professional services are no longer required, he is justified for business reasons in

sending his statement covering the bill on the first of the month following the date of termination of his services. The recollection of the efforts, that he has made in rendering this service, should prompt the client to meet the obligation at an early date.

In a very large number of cases, it will be found that remittance will be made promptly. If the physician, instead of sending his statements at the end of the month, allows the account to run along for three or four or six months, as is very often the case, the client has perhaps half forgotten the service that has been rendered and therefore is more likely to put off indefinitely the matter of payment. Many physicians will say, perhaps, "I am too busy with my practice to see that statements go out to my clients every month." If a man is so busy that he is not able to take care of matters of this kind, he would be thoroughly justified in having someone go over his accounts at least once every month to see that his statements are sent out and that accounts are followed up regularly for collection. The small expense for such assistance in collecting the accounts will be repaid amply by the returns in collections made. There will be fewer old accounts to be charged off to profit and loss, and fewer accounts which will drag along for years and years before they are ultimately settled.

The Client Will Respond

A question may arise in the mind of the physician regarding the attitude of his clients towards him if he adopts a businesslike system of handling his accounts. The writer is confident that the majority of the people who call upon the professional man expect to pay him, and in most instances they expect to pay him promptly. The chief reason, why so many of the doctors have to wait so long for their money, is simply that they invite delinquency by an evident hesitancy in asserting their business rights. To such an extent has this become true, that people leave the doctor the last one to be paid. In other words, they apparently show their contempt for him as a business man by not treating him in a businesslike manner. Absolutely, the doctor will find himself and his services held in higher esteem if he lets the people know that he considers his services to be worth what they are paying him, and if he insists that they should be paid for promptly.

The doctor hesitates to resort to any unethical means of publicity, but he will find that a neat, businesslike statement sent out from his office will be just as much of a re-

minder that he is in the field and is ready to serve the people, as any amount of advertising that he can do. In other words, the more businesslike a man is, whether he be a professional man, a grocer, a druggist, the more will he be held in esteem in his community.

Do not conclude, Doctor, that there is no money in your community simply because people do not rush into your office and pay you what they owe you, when you make no effort to collect. The very people who owe you money for professional services are riding past your office in their automobiles, are going to theaters and moving-picture shows, are dressed well, and are living well. You may be sure that your "Uncle Henry" is getting paid for his cars, that the renowned Golfer of Ormond is getting paid for his gas and oil, and that the shoe man, the clothing man, and the dressmaker are getting theirs. If people have money enough to enjoy not only the necessities but also the actual luxuries of life and pay for them, they certainly should arrange to have enough money to reward the professional man for his long hours of hard service day and night, year in and year out, so that he may be relieved of the worry and anxiety consequent upon his inability to properly maintain his family and meet his own obligations.

In the following paragraphs, are suggestions with reference to handling accounts, sending out statements, and following up collections, etc.

Some Practical Suggestions

Every physician should carefully set down, in some sort of a book of original entry, his charges for services rendered, and also credits for whatever collections are made. These debits and credits should be posted on the several accounts in some sort of a permanent record, so that the condition of the account may be immediately and easily ascertained. Either a looseleaf ledger, arranged alphabetically according to the name of the client, or a physician's card system which many use, is most available for this purpose.

Along toward the end of the month, the accounts should be gone over and statements drawn off and mailed to the clients. The first statement should be itemized, showing the various charges and the total. It will be found that there will be a very large response to the first statement, and remittances coming in will either balance the account in full or make part payment. In case the client remits a part payment on account, credit for the payment should show on the next statement

which goes out, and the new balance due on the account should be shown. This statement may be considered as a second No. 1 statement on account. On those accounts on which no payments are received, the second statement may be sent, and it might be well to have a rubber stamp made calling attention to the fact that it is the second statement and asking for the courtesy of attention to the account. At the beginning of the next month, such accounts as are not paid may receive the third statement which, like the second statement, will merely state the total amount due and on which a rubber stamp as follows may be used:

PAST DUE

This account has no doubt escaped your notice. Will you please favor me with a remittance promptly and oblige?

After sending the third statement, there may still be some accounts that are not paid. On such accounts as these, it might be well to follow up with some special letters every fifteen or thirty days, each following letter to be a little bit more insistent upon a payment. We give below a series of seven letters, part or all of which may be used. These letters may be obtained from a local printing office, where the printer will be able to set them up in typewritten form, and then it will be necessary merely to fill in on the typewriter the name and address of the client. In order to know just what statements and letters have been sent on an account, it would be well to mark on the record "1S", "2S", and "3S", meaning first, second and third statements, and "1L", "2L", and "3L", meaning first, second and third letters. When the account has been balanced by a remittance in full, a line in red ink or lead-pencil might be drawn at the end of the account, and it will be ready for further debits.

Letter No. 1

Date.....

Dear Sir or Madam:

Having rendered my statements for professional services without receiving your attention, I feel under the necessity of asking that you kindly favor me at this time.

The balance due me on your account is \$.....

Very respectfully yours,

Dr.....

Letter No. 2

Date.....

Dear Sir or Madam:

Your attention is respectfully called to the enclosed statement of your account, which is

considerably past due. If present conditions do not permit you to pay the entire amount of the account, kindly arrange to make at least a part payment, and the balance may be taken care of a little later on.

Trusting that you will appreciate the necessity which compels me to be a little urgent in this request, I am

Very truly yours,

Dr.....

Letter No. 3

Date.....

Dear Sir or Madam:

If I thought that you are intentionally neglecting to pay me for professional services rendered to you, I would feel sad. The delinquency of the account, however, is such as to cause me no small embarrassment. In a previous letter, I suggested that you make at least a part payment on account, and even a small payment would be an evidence of your good intentions.

Trusting that I shall not be under the disagreeable necessity of again asking you to take care of this item, I am

Very truly yours,

Dr.....

Letter No. 4

Date.....

Dear Sir or Madam:

Numerous statements and letters have been sent you covering professional services rendered, without reply or remittance.

Will you please let me know what your intentions are as to the payment of this account?

Very truly yours,

Dr.....

Letter No. 5

Date.....

Dear Sir or Madam:

No reply having been received to my previous letters, I can only judge one of three things:

First—Simple neglect.

Second—Indifference.

Third—You question my bill.

Whatever the reason, it is only fair that you let me hear from you at once stating your position in the matter.

Yours truly,

Dr.....

Letter No. 6

Date.....

Dear Sir or Madam:

Will you please consider the moral obligation which is yours to pay my bill for professional services rendered?

I regret very much to have to refer to your

legal obligation, but, unless your remittance is received in full or in part within fifteen days from date of this letter, I shall feel under the necessity of placing this account in the hands of my attorney for collection.

I have been generous and very patient, and have put myself to no little inconvenience and loss in my endeavor to accommodate you. Please relieve me of the very disagreeable duty referred to.

Very truly yours,

Dr.

Letter No. 7

Date.

Dear Sir or Madam:

Notice is hereby given you that your bill amounting to \$..... for professional services rendered, has been forwarded to my attorney for collection.

Legal proceedings are costly to the debtor in more ways than one. The only way in which legal proceedings can be prevented is for you to make a remittance immediately.

I trust you will see the advisability of doing this now.

Yours truly,

Dr.

After having exhausted these efforts, such accounts as are not paid should be handled in whatever manner seems to be most justifiable. As a last resort, the account may be placed in the hands of an attorney, who will collect it on a percentage basis. The physician will probably find, however, that there is a comparatively small percent of the accounts that will have to be handled in any such manner and, in fact, he will very likely be agreeably surprised to find that he can charge off to profit and loss whatever may be left without seriously handicapping himself financially.

The physician should not allow himself to be discouraged if first efforts do not produce fully desired results. Continued systematic and persistent efforts may be necessary, but such efforts will, in the end, be found effective.

The Pestiferous Dead-Beat

In some communities, the professional men have found it of advantage to unite in some sort of an organization which will be mutually helpful. In every community, there is found

that variety of vegetable called the "dead-beat," who is out to skin everybody he can, and an organization among physicians would enable them to advise each other regarding these people. The man who will not meet his just obligation will go from one source of credit to another, whether it be a physician or what not, and he has absolutely no use, and does not hesitate to say so, for the doctor to whom he owes money in return for professional services that he was glad to accept. Such a man should be known immediately to all of the physicians and they should each refuse to render service until the obligation has been met.

There is always a great deal of charity work that the professional man must do in his community; but he knows what that is, and he figures on it in his work. We would not take from the doctor that great responsibility and real privilege of rendering service to the unfortunates who really need special consideration in his community. There is, however, no excuse for 99-percent of the people as far as meeting their obligations with a reasonable degree of promptness is concerned. Organize in your community, stand by each other against the imposition of the man who will not meet his obligations, and a great deal of the trouble will be overcome.

Perhaps you will run up against the proposition of one physician in a community who will not join the organization. Let him stay out! It will not be very many years until he will find himself taking care of all of the dead-beats and, sooner or later, he will be glad to come in.

Let the professional man remember—first, last and all the time—that self-respect is the first requisite of earning the respect and consideration of others, and there is no one who will win this respect more quickly than the man who has respect for the value of his professional services and who insists that he must be paid. Above everything else, the physician should prepare himself to give the very best of professional services and, when he has done this, he is entitled to the remuneration that such services represent.

4753 Ravenswood Ave.

Concerning the Action of Brine-Baths

Containing Calcium Chloride and Carbondioxide (Socalled Carbonic Acid) With Some Remarks About the Physiological Effect of Hydrotherapeutic and Balneologic Procedures

By ALFRED MARTIN, M. D., Bad-Nauheim, Germany

IN the November, 1923, issue of this Journal, I published an article entitled "Is Rejuvenation Without Steinach Possible?" This question I answered affirmatively because the results of vasoligation are analogous to those of calcium-chloride feeding and of the employment of carbonated brine baths containing calcium chloride. They possess the advantage that they can be repeated indefinitely which, of course, is not the case with vasoligation.

On calcium-chloride feeding, I intend to write on another occasion. At the present time, I desire to discuss the treatment with carbonated brine baths that contain calcium chloride.

If the three methods under consideration have an identical effect, it must be assumed that the same active agent forms the basis of all of them. In the case of calcium-chloride feeding, it is, of course, this salt that is effective; in the carbonated brine-baths containing calcium chloride, the same is true, providing that the salt is assimilated in the body. In case of the vasoligation, it must be a question of preventing calcium demineralization—a view which has also been advanced by Doctor Achard. And, in this respect, vasoligation would act as a calcium sparer.

Is it possible for calcium chloride to be absorbed in the body, from carbonated brine baths containing this salt? In the course of the last century, the opinion had gradually been developed that the uninjured skin absorbs neither salts nor carbonic acid from the bath water into the body. According to this view, the mineral baths would act solely (excepting the addition or abstraction of warmth) as an irritant upon the skin—first upon the skin itself and then, which was held to be the main effect, from the skin by way of the reflexes influencing the internal organs.

Hydrotherapeutic Substitutes

That result was obtained also through hydrotherapeutic measures and, in consequence, the special effect of natural curative baths was believed to be solely in external causes: namely, the absence of business activity leading to freedom from care and excitement. The man leaves his business, the woman is, for once, free from the cares of the household, the mother is relieved of the care of her little

flock. The patient is obliged to keep regular meal times and to maintain a reasonable diet—and various other things, all of which are of actual importance in the bath cure. Condition is only that the financing of the cure, the absence from business and from household are not of themselves productive of care and excitement. To have a well-filled purse and to leave care at home, that was in the sixteenth century already the first condition for a successful bath cure.

For this reason, the natural baths were not only imitated artificially but were replaced by hydrotherapeutic procedures of other kinds. If the natural carbonated brine bath acts only by virtue of chemical stimulation, this can be replaced by a mechanical stimulation, such as massage and douching while in the bath; and this stimulation will be increased if the patient moves about vigorously and if, while in the bath, he applies friction to his own body: if he displays muscular activity as it is done, for instance, in swimming.

These three procedures, namely, swimming, the so-called half-bath of the hydrotherapists (as just described) and the carbonated brine-bath (in which here the brine is in the background) all three have one effect, namely, that it is possible to bathe in water far below the indifferent point of temperature, without being cold. After the initial brief shivering, a pleasing feeling of warmth must be noticeable which is associated with redness of the skin. The patient leaves the bath much refreshed. This is the so-called reaction of the hydrotherapists. It is on this account that cold-water cures are in sharp competition with the natural curative baths.

If the procedures are understood in this sense, they may be substituted one for the other.

Hydrotherapy Not Identical With Balneology

However, this is not always feasible. There are patients who must sit quiet in the baths and that is not done in the so-called half-bath, but in the carbonated bath where it has the same result. More, there is a difference between the two kinds of baths in the kind of stimulation. The carbonated bath warms differently, it warms more. Not only does the

redness of the skin appear, together with the associated feeling of warmth, but the calorific nerves are stimulated; the sensation of warmth, even of heat, appears more quickly than in the half-bath. This has been utilized practically by my teacher, Professor Matthes, now in Königsberg, in the cold-water treatment of typhoid-fever patients. Patients who constantly shivered in the half-bath were given a few cold carbonated baths and then tolerated the half-bath well (1). These patients were lacking in sufficient reactive power.

Thus, there is in the carbonated bath a point of superiority over the half-bath of the hydrotherapeutist. There are anemics and feeble persons in whom the reaction fails to occur even in a warm room and when they come out of the warm bed. They feel uncomfortable, shivery, and can get warm only slowly and with difficulty. In these patients, the carbonated bath may be tried. It goes without saying that this bath must be given in a well-heated room and, at first, as a half-bath. As in all carbonated baths, care must be taken that the mouth and nose of the patient should be above the border of the bath-tub. For, especially in artificial baths, the carbonic acid escapes from the water and, being heavier than atmospheric air, it accumulates in the upper portion of the tub, which is not occupied by the water. If the carbonic acid rises higher, it flows over the border of the bath-tub, down its sides to the ground. If mouth and nose are higher than the top of the tub, no carbonic acid can be inhaled, and intoxication does not occur.

Difference Between Natural and Artificial Baths

What has been remarked holds good for the artificial as well as the natural carbonated bath. What is the difference between the two? In the investigations concerning the physiological effect of carbonated bath, which related especially to the influence upon the hemodynamics, contradictory results were obtained. That is partly due to the fact that some studied the effect of the artificial carbonated bath, others that of the natural bath. It is denied by notable chemists who investigated healing springs that there is a difference in the kind of the carbonic acid in both baths. This was done, for instance, by Hintz and Grünhut (2), who, to be sure, do not admit that nature possesses any advantage whatever as compared with chemistry.

As a matter of fact, the question is idle, since there are no pure carbonic-acid springs in nature. Wherever there is carbonic acid, there is also salt in the water. This was seen conclusively in Bad-Nauheim, when the old water supply no longer sufficed for the rapidly growing town and borings were made nearby for sweet water (drinking water). When sweet water had been found, the precaution was observed not to build a station immediately but rather to pump continuously for two weeks. Suddenly, there appeared bubbles in the water, that is, carbonic acid and, hence, salt. Today, Nauheim obtains its excellent drinking water from a spring more than 20 kilometers distant (about 12½ miles), in the extinct tertiary volcano Vogelsberg, the largest volcano of continental Europe. From here, Frankfurt also is supplied with drinking water and, as a reminder of its volcanic nature, it has given their carbonic acid to numerous mineral springs, those along the Taunus as far as Wiesbaden, the Rossbach water which is well known in America, and, above all, to the Nauheim springs.

If the physiological effect of the artificial carbonic-acid bath is compared with that of the natural, an error is committed in so far as, in the case of the natural bath, the saline content has been left out of consideration. Moreover, the physiologically active carbonic acid is different in the natural carbonated brine-bath from that in the artificial carbonated bath, even if salts are added to the latter, such as sodium chloride and potassium chloride, or even the entire residue left after evaporating the mineral water.

Besides the free carbonic acid in the natural carbonated brine-bath, a carbonic acid is effective which, until recently, was designated as half-bound carbonic acid. These springs contain carbonic-acid compounds, namely, hydrocarbonates, which are in solution because of the presence of free carbonic acid, respectively because of the absence of free oxygen: namely, calcium hydrocarbonate, magnesium hydrocarbonate, ferrohdrocarbonate. In order to simplify the matter as much as possible, I shall consider only the calcium hydrocarbonate and leave out of consideration the differently-constituted ferrohdrocarbonates and the complicated processes of iron precipitation.

The calcium hydrocarbonate which is in solution in the water is kept so only through the presence of free carbonic acid. This free carbonic acid prevents the escape of the carbonic acid from the calcium hydrocarbonate in which it is bound only loosely. If free

¹Matthes, *Lehrbuch der klinischen Hydrotherapie*, 2. Auflage, Jena, Gustav Fischer, 1903.

²Dietrich und Kaminer "Handbuch der Balneologie, Medizinischen Klimatologie und Balneographie," Leipzig, Georg Thieme, 1916, Band. 1.

carbonic acid escapes from the bath, then the calcium hydrocarbonate loses its free carbonic acid. This goes into the water, and there remains calcium carbonate which, being insoluble in water even in the presence of free carbonic acid is precipitated. The process is a very slow one and it is not possible to replace the escaping carbonic acid entirely. It is not necessary to assume a special effect of the carbonic acid which is present here in *status nascendi*. The fact that the escaping carbonic acid is partly replaced differentiates the natural carbonated brine-bath from the artificial carbonated bath with regard to the carbonic acid. The former is saturated from the first with carbonic acid and remains so approximately to the end of the bath. It may be noted that, on standing in the open air, carbonic acid is liberated also from the magnesium hydrocarbonate and the ferrohydrocarbonate.

Action of Carbonic Acid

Until not so very long ago (and many maintain the idea even today) it was assumed that the carbonic acts solely as a cutaneous stimulant, principally as a hemodynamic: First, as carbonic acid as such; second, because, by stimulating the calorific nerves, it permits a temperature of the bath-water far below the indifferent point and thus exerts also an indirect hemodynamic action.

In my opinion, in treating cardiac patients with carbonated brine-baths, this hemodynamic effect and (with it) the action of carbonic acid as a whole have been overestimated. The effect is present and consists mainly in a better blood supply to the internal organs. Many such a cure took an unfavorable course or had to be interrupted because the possibility mentioned as the second point, namely, to influence the circulation by a low temperature, was made use of too intensively. I do this only in a moderate degree and usually (in contrast to the Nauheim tradition) I do not go below 32½° Celsius (91° F.) when the results are good. Only in summer when the outside temperature is high, also when the patients find the bath too hot and in people who are accustomed to cool baths, I permit lower temperatures. Individual peculiarities and habit are here important. In the indifferent bath also, the carbonic acid dilates the cutaneous capillaries and depletes the internal organs. Stimulation and effect are far milder than when low temperatures are employed, a point that is particularly important for anemic, feeble and old persons. It is necessary to remember the biologic fundamental law which is known today as the Arndt-Schulz biologic

law, propounded first by Arndt.

The Arndt-Schulz Biologic Law

Concerning this law, Hugo Schulz, professor of pharmacology in Greifswald reports, in his "Vorlesungen Über Wirkung und Anwendung der unorganischen Arzneistoffe" (Leipzig, 1920). Rudolf Arndt, the former psychiatrist in Greifswald, formulated the "biologic fundamental law" which he offered first as follows:

Feeble stimuli incite the vital activity; moderately strong stimuli promote it; strong ones impede it and very strong ones inhibit it. However, it is an entirely individual matter as to what is effective as a feeble, moderate, strong, or very strong stimulus. Schulz adds to this:

"Arndt formulated his law mainly with reference to the processes in nature occurring under normal conditions. In the middle of the eighties, I succeeded in proving that the numerous phenomena which we observe on studying drug action can properly be viewed as being subject to the same law. It is necessary, though, to consider one point, which was already indicated by Arndt when he mentions the importance of the individual for the evaluation of the stimulating action. In case of the drug effect which is confirmed practically, it is a question of diseased organs and organisms. These are *a priori* in a state of irritability differing from the physiological one. They may react to stimuli which are barely, or not all, felt under normal conditions, in a state of complete health. Thus, a relatively slight catarrh of the conjunctiva suffices to render the daylight intolerable to the eye which, ordinarily, is quite accustomed to it. It would not be proper to forget this increased irritability of diseased organs and tissues when we attempt to produce a curative reaction in a diseased organ with the aid of a drug."

I have reproduced this law literally. In Schulz' own words because, latterly, it is often quoted, though never in detail—evidently because the original was not read.

Schulz' remarks concerning the dosage of drug remedies, with reference to the state of irritability as it is determined by the individual and the pathological state of the subject, is true also for chemical and physical stimuli which influence the body from outside—for instance, for carbonated baths and carbonated brine-baths.

Action of Carbonic Acid

The carbonic acid acts not only as an external stimulus. It belongs to the lipid-soluble substances passing through the fatty layer of the skin into and below the epidermis; the point of entry is afforded by the sebaceous glands. That the carbonic acid is absorbed, was shown by Professor H. Winternitz, in Halle, in an experiment undertaken for study-

ing the gaseous metabolism. He found that the presence, in the bath, of from two to three percent of sodium chloride increases the rapidity and quantity of the carbonic-acid absorption. When the lipid layer, which is impermeable for salts, is dissolved (by the carbonic acid), the way is open for those salts which are free in solution in the bath water. So then, it is not improbable that iron, which is found in solution in many carbonic-acid-containing spring water in the form of ferohydrocarbonate, is absorbed; the quantity does not need to be great. The important point is, that the sebaceous glands serve as points of entry.

According to the *Berichte der Deutschen Chemischen Gesellschaft* (14. Jahrg., Berlin, 1881) Champouillon (C. R., 92, 1011-1013) has written an essay dealing with the absorption of mineral waters through the skin. In the French watering place, Luxeuil, he found definite quantities of iron and manganese in the urine (0.003 to 0.007 Gram *pro die*) in one-third of the cases examined after the use of the baths. According to the "Lehrbuch der Balneotherapie" by Julius Glax (1. Bd. Stuttgart, 1897), the observation was made in fourteen cases, and the demonstration was successful only late in a three-weeks' cure, while it failed entirely in anemic person, because, Champouillon believes, the absorbed quantities are retained by the hemoglobin in the anemic patients. Glax marks this last passage with "!" because, being an opponent of the absorption idea, he desires to characterize the assertion as entirely unacceptable.

I can not get it into my head that the *absorption* of a constituent of mineral water into the body, during the bath, is to be demonstrated by means of its *elimination* in the urine. The absorption of small quantities which remain in the body is difficult to demonstrate by direct methods. It will be necessary to resort to my method, namely, to conclude from like effects that like causes exist—as I have done for calcium chloride—and then to show that the possibility exists.

In consequence of the solution of the skin lipoids by the carbonic acid, first, the path has been opened for the most readily soluble salt, the calcium chloride. When this has entered

the body, it unfolds all the effects which are characteristic for calcium chloride introduced in any way whatever. I will mention only a few with reference to the heart which have been determined experimentally. Ringer showed, on the frog heart, that calcium chloride not only increases the amplitude of the contraction but that it also prolongs the systole; Rothberger and Winterberg observed on cats that, after the injection of 0.2 to 0.3 Cc. of a 10 percent calcium chloride solution, the volume of the contraction was notably increased (something that we try to bring about whenever we treat a sick heart), while the pulse frequency was unchanged or was diminished only slightly (cf. Tigerstedt, "Physiologie des Kreislaufs," 2. Aufl., Band 1).

It is a mistake to say that the good results of treating cardiac patients in carbonated calcium-chloride brine-baths were hitherto attributed to exclusively the carbonic acid. This is shown by the fact that the good results in the treatment of cardiac patients, which gave to Nauheim its reputation as a resort for such patients, were not secured with the bubbling springs that are rich in carbonic acid. At first, the spring water was not taken direct from the pipe into the bath-tub but was permitted to stand for a while in the open air; hence, it lost carbonic acid and absorbed oxygen. This bath is still in use to this day and is called the thermal bath. The water is cloudy, like an emulsion, slightly rust-colored because of the precipitated iron which it contains in the form of a colloid; calcium carbonate and magnesium carbonate are present in finely-divided precipitation. In my opinion, the relatively small quantities of carbonic acid are present in the water in the form of minute bubbles. Sodium chloride and calcium chloride are in solution. The water of this spring has not been examined chemically and it can not be reproduced artificially.

Consequently, the favorable action of the carbonic-acid containing calcium chloride brine-baths upon cardiac patients must have another reason in addition to the hemodynamic action of the carbonic acid: This other reason is the calcium chloride which manifests its favorable effect especially in advancing age periods.

Remember Mothers' Day: May 11.

The Problem of Dentifrices

Special Article

EDITORIAL COMMENT.—A few months ago, we mailed a questionnaire to a selected list of dentists, oral surgeons, clinicians and investigators, in which we attempted to obtain light on certain questions arising out of the use of abrasives and dentifrices. The responses were gratifying. Below, we print our letter and also a symposium prepared from the answers that we received. We also refer to an editorial on page 292.

WE HEAR a great deal these days on the subject of closer cooperation between the physician and the dentist. The discovery that foci of infection about the teeth are at least in part responsible for many other ailments in other parts of the body, has done much to create the demand that dentists should know more about the disease in other parts of the body, that physicians should know more about oral diseases, and that the two professions should join together in a closer study of their mutual problems. Certain it is that many obscure conditions have been traced to dental origins, and it is quite the common thing nowadays for physicians to include, in their general examinations, a careful diagnosis of conditions in the oral cavity and, after such examinations (particularly when accompanied by x-ray photographs of the teeth and supporting structures) to send their patients to the dentist with instructions that certain teeth shall be extracted as an aid in removing suspected foci of infection. Not only do abscessed and similar infections about the roots of the teeth receive this attention, but diseases of the gingivae and pyorrhea concern the physician to an increasing extent in his efforts to ascertain and remove original causes.

It is generally admitted that the greatest advances in the study of dental conditions, to be made in the next decade or two, must be along lines of prevention, or prophylaxis. Hence, we use an increasing interest in oral hygiene fostered by the innumerable agencies of the dental and medical professions, and the physician is repeatedly urged to align himself more closely with this oral-hygiene movement and to support it by promoting oral hygiene among his patients. The prevention of abscessed conditions, or pyorrhea (which lately has become more professionally known as periodontoclasia or periclasia), is best accomplished by careful and regular attention on the part of the individual to the maintaining of a clean mouth. Much attention has been devoted during the past few years to methods of obtaining a clean mouth, but little progress has been made beyond the advocacy

of regular daily brushing of the teeth with an approved dentifrice, although some advocate, in addition thereto, the use of dental floss and antiseptic mouthwash.

The physician naturally looks to the dentist for some clear-cut and generally-accepted program of oral hygiene that he may recommend to his patients. There are certain questions which come to his mind upon which he seeks information from the dentist, only to find great differences of opinion as to the best means for accomplishing the desired result. Can pyorrhea be cured without the wholesale extraction of the teeth? Can apical abscesses be eradicated through treatment or must the teeth come out? Shall the dentifrice be acid or alkaline? Shall the physicians recommend a powder, a paste, or a liquid? Shall the end-tufts of the brush be short or long? It seems that there are no generally-accepted opinions on any of these subjects.

It has repeatedly been claimed that many of the dentifrices in common use are potentially harmful, due to the relatively large amounts of insoluble polishing agents which they contain. Is it possible that the very instruments used for maintaining oral hygiene may perhaps cause the very conditions which they are intended to prevent? This phase of the question has interested us to the extent that we sought to obtain some authoritative opinions on the subject.

Accordingly, the following letter was sent to some forty or fifty well known dental practitioners in this country who for years have been particularly interested in the oral hygiene movement:

"It is a well-known fact that, when teeth are brushed with an ordinary tooth brush, using powdered charcoal, a very fine degree of cleansing of the tooth surface is accomplished. But, if charcoal is used regularly, twice a day, within a very few days, a bluish line is formed in the gum margins and this line becomes broader and more distinct as long as the use of charcoal is continued. This indicates that the fine particles of charcoal are forced into the gingival crevices, and, ultimately, these fine, sharp particles of charcoal work their way into the tissues themselves.

"The majority of dental pastes and powders

on the market contain a large percent of some form of insoluble abrasive. This abrasive may be extremely finely pulverized and may not be any harder than the enamel, if as hard; so that, in actual use, it will not scratch the enamel. However, it stands to reason that, if the particles of charcoal work their way into the gums, as they do, these extremely fine and sharp particles of grit used in tooth pastes and powders also must work their way into the gums. They are not visible because they do not have the black color of the charcoal.

"More people are brushing their teeth regularly today than at any time in the past, and most of them probably use one of the advertised dentifrices which contain these insoluble abrasives. In spite of greater attention to so-called oral hygiene, some believe that there is more pyorrhea today than in times past.

"Might it not be the case that these fine particles of grit, working their way into the gingival tissues, ultimately produce an irritation and inflammation leading to infection or, in other words, 'pyorrhea'?"

"Might not this account for many cases of pyorrhea in which there is no evidence of traumatic occlusion or other common predisposing causes?"

"Should not the ideal dentifrice be one which has no insoluble ingredients?"

"I very much desire to obtain some authoritative and competent opinions on the points raised in this matter and should be grateful if you would have the kindness to annotate the letter and return it to me. If you care to write at length on the problem raised, your kindness would be appreciated. In any case, I want you to be sure of my gratitude for any assistance that you may be able to render me in this matter."

It is interesting to note that the directors of the two leading dental infirmaries of the country are inclined to believe that the insoluble grits in the ordinary dentifrices are harmful. Dr. Harold DeW. Cross, Director of the Forsyth Dental Infirmary for Children at Boston, writes as follows:

"It seems to me that the fine particles of grit contained in many advertised dentifrices may work their way into the gingival tissues, and in all probability are a contributing cause of pyorrhea. In my opinion, this is only a contributing cause; faulty metabolism is probably more important than any local cause. A dentifrice having no insoluble ingredients would be a much better one to use."

Dr. H. J. Burkhart, Director of the Rochester Dental Dispensary, Rochester, N. Y., has apparently given this matter much study as he has written on the subject, two of his articles having appeared in the October and November, 1923, numbers of the "Delineator." He says:

"I agree with you very fully that an insoluble abrasive like charcoal is not the proper thing to use as a dentifrice. You state the reasons for your opposition to their use very

well, and the conclusions you draw, to my mind, are sound.

"I have never thought there were any germicidal properties in any of the preparations on the market, for the simple reason that any germicide used that would destroy bacteria would also destroy the tissues of the mouth, if it were to accomplish its purpose. In my opinion, the value that comes from the use of any preparation is in having it agreeable and pleasant, so that people will get in the habit of brushing their teeth. In our educational and lecture work in school and dispensary, we try to stress the importance of brushing the teeth and keeping the mouth clean, because we believe, if we can induce children to see the importance and value of a clean mouth, they will realize the need of personal hygiene in every direction."

In some instances, the pendulum swings all the way over to the other side. For instance, we have this from Dr. Frederick B. Noyes of Chicago:

"The late Dr. G. V. Black was the most careful and logical student and investigator the dental profession has produced. From personal association with him, I know that he was positive in his opinion that the teeth were best cleaned and the mouth cared for by vigorous brushing, at least twice a day, with a stiff bristled brush and *clear water*."

Dr. J. V. Conzett, past president of the American Dental Association, says:

"Your reasoning is logical and, undoubtedly, a dentifrice with soluble contents that would cleanse and polish the teeth would be much preferable to one the contents of which were insoluble and abrasive."

A number of men admit the theoretical harmfulness of insoluble agents in dentifrices, but say that, in their own experience, they have never observed any clinical manifestations which would bear testimony to the theory. Following the receipt of our letter, Dr. Frank W. Low, of Buffalo, had as his guests for dinner, eight prominent members of the dental profession of New York State, and the letter was read aloud and opinions asked of each. He reports:

"They were unanimous in the opinion that, while theoretically any insoluble substance incorporated in dental cream or powder might not be entirely tolerable to the gum tissue, none of them had ever observed any evidence of the deleterious effects consequent upon its use."

"Dr. A. R. Cook said, if I would examine microscopic slides made of charcoal and the powders entering into any of the present-day dentifrices, I would notice, while the charcoal particles had sharp and spikelike points and edges, the others had not. In the meantime, both he and I believed that the pigmentation resulting from the use of charcoal became more or less permanent, that the tissues might and probably did exfoliate and rid themselves of the charcoal particles."

"It is something like twenty years ago that

I read a paper before the Fifth District Dental Society, the closing paragraph of which was, 'The most important constituent of a good dentifrice, accompanied by vigorous elbow grease, is good wet water.' And up to the present I have never felt called upon to retract that statement."

The question naturally arises whether or not a more careful microscopic examination of the gingival tissues might not reveal some mark produced by the insoluble grits, and whether or not careful chemical analysis of the so-called "tartar" removed from about the necks of teeth might not prove to be in part at least composed of these insoluble abrasives.

Dr. R. W. Bunting of Ann Arbor writes:

"This question has been raised many times before, but, so far as I know, no one has definitely proved that certain of the more insoluble portions of the various dentifrices have harmful effects. . . . The point is, that any of these materials, when used alone, as in the case of charcoal, have a very different action from that which they would exert if they were incorporated with soaps and colloidal materials which are usually included in various forms of dentifrices. This applies not only to the abrasive action which they have on the teeth, but also to their tendency to lodge beneath the gums or to be impregnated into the gingival tissues. Theoretically, the argument which you raise against insoluble material in the dentifrices seems to have some support, but clinically I have never had a case come under my observation in which any such deduction as this may be drawn. . . . When improperly used, we find that the brush and the dentifrice may wear the teeth and cause a retraction of the gums which seems to me to be due more to severe traumatism of the labial gum tissue by the toothbrush than to the particular dentifrice used.

"The fact is, doctor, if a mouth is once cleaned up and put into a condition in which it can be kept clean, the average individual can keep his mouth in very fair condition by the use of the brush alone without any dentifrice. However, dentifrices seem to be an item of psychological importance in that many persons will care for their mouths if they are given an expensive dentifrice to be used and thereby will perform the act of cleansing their mouth more willingly than if they were told that they could do it by much simpler means. So far as the use of dentifrice is concerned, I think that, with the exception of two or three of the more abrasive types, they perform a real service in encouraging people to keep their mouths clean and to value a clean mouth."

Dr. Arthur H. Merritt of New York City, rather favors dentifrices in which there are insoluble ingredients. He says:

"Powdered charcoal, when used as a dentifrice, is forced into the gum because of the crystal-like nature of its particles which are not comparable to those which make up the average dentifrice composed of precipitated

chalk. I am doubtful, therefore, whether dentifrices, poor and unscientific as they are, can be regarded as causative factors in the production of diseases of the gingivae.

"While it is true more people are brushing their teeth at present than at any other time in the history of civilization, it is not true that pyorrhea is more common than in the past. Greater appreciation of its importance and better facilities for treatment have served to focus our attention upon it and give it a prominence which it never had before.

"I have no hesitation in saying that in my opinion bad hygiene is the primary cause of the vast majority of cases of pyorrhea and that, if the mouth were kept clean and the gingivae freed from the irritating effect of bad hygiene, most cases would by that simple means be presented. Dentifrices have no therapeutic value; their value is simply that of an abrasive cleansing agent. It is, doubtless true that some of them may be injurious by being too abrasive. Other things being equal, I believe that a dentifrice in which there are insoluble ingredients would be desirable."

Somewhat the same opinion is held by Dr. Harris R. C. Wilson of the Cleveland Mouth Hygiene Association, whose remarks follow:

"Your comment on charcoal is true and is the reason why charcoal as a dentifrice has long been condemned by the majority of the dental profession. The fallacy of your argument occurs in the third sentence of the second paragraph in your letter. The particles of the insoluble ingredients commonly used in popular dentifrices of the day are very different in shape from the slivers of charcoal. Therefore, I see no reason to criticize the commercial dentifrices on this score. I think it unlikely that the insoluble ingredients of tooth pastes are a cause of pyorrhea."

Dr. Jules J. Sarrazin, of New Orleans, has long been prominently associated with the oral-hygiene movement and has written and spoken on the subject in considerable volume. His letter and reprints are worthy of a much more extensive reproduction than is possible in this paper. A few of the more important points, however, which he stresses are as follows:

"I would say on the subject of tooth powders with insoluble bases that there is danger of mistaking an effect for a cause.

"Gingivitis (with tumefied gum margins, and therefore deepened crevices, primarily caused by infectious mucin films on teeth necks) always precedes pyorrhea. There is the local etiology. If any *very fine* insoluble powder is used on tumefied gingivae, it will lodge in crevices and become a mechanical irritant heavily charged with bacteria. But, if gum margins are normal, all powders will be washed away. A reasonably coarse insoluble powder (say not quite 200 fine) is less apt to lodge in normal microscopical crevices than a still finer one, and is more apt to be carried away by saliva and secretions. For that reason, pumice, which preserves microscopical

angularity at an approximate fineness of 200 meshes to the linear inch, has my preference as a base for Riggs'-Disease conditions, but, of course, no crosswise brushing must be done, and bristles stroke must be from opposite roots to crowns.

"A soluble base powder retaining in use enough abrasiveness to break up mucin films would of course be ideal, but all attempts in that direction have been disappointing. . . . Nor do clinical and laboratory tests of liquid solvents of mucin films applicable to the mouth, which have recently evolved under high authority, give any more satisfactory results, and we must therefore still depend upon insoluble abrasiveness to thoroughly do the film breaking and removing. To be really effective, the toothbrush and powder must be supplemented by a tape (already charged with powder by the manufacturer) to rub up and down between teeth, or else proximal surfaces of teeth are left covered by infectious films and that is just the main reason why the worst pus pockets are usually found proximally of teeth roots. There has the infection started which has caused tumefaction of gingival margins all around crevices of teeth resulting in deepened crevices, and when any very fine powder is brushed, it penetrates these pathological crevices whence neither rinsing nor mouth fluids can remove it. Pyogenic bacteria from mucin films, or from hard deposits, are admixed to the powder resulting in deeper penetration of the powdered particles.

"If the powder had been coarser, its particles would have laid on gum margins with less tendency to enter crevices, and would be washed away, but the fact remains that the penetration of even fine particles is due to tumefaction resulting from infection, and not the cause of conditions which develop ever deepening ingress of insoluble particles."

Confronted by such a diversity of opinion among the leaders in this line of service, how

is the physician, who has the best interests of his patient in his heart, to know what should be his recommendation? How is the dentist to suggest a proper procedure to the physician when that procedure apparently is questioned by high authority? We hope that this discussion will to some extent aid the physician in that it presents the opposing viewpoints and gives him the opportunity of choosing that which seems most logical to him. We hope also that it will result in focussing attention upon what seems to be a very important matter, and will lead to more definite research which should prove the issue in one way or another. It is encouraging to know that such research is being conducted, and we close this discussion with a hope for the future in the following letter from Dr. H. E. Friesell of the University of Pittsburgh, School of Dentistry:

"In the light of present knowledge on the subject, I feel it impossible to give accurate replies to your questions. In fact, I feel that anything I might say at the present time would be more or less speculative because of the paucity of information that is based upon systematic research. I might add, however, that the general problem has for some time been under investigation jointly by the School of Dentistry and Mellon Institute of Industrial Research of the University of Pittsburgh and, upon the conclusion of this combined dental-biochemical study, the results will be published. . . . The investigation under way here is of broad scope and at present it is impossible to predict when definite conclusions can be drawn therefrom. It will be a pleasure to cooperate with your Journal upon the completion of the work which has been planned."

The Frenal Chancere

Subpreputial Ulceration in Cases of Phimosis

By HERMAN GOODMAN, B.S., M.D., New York

AS the result of a long clinical experience in civilian and military clinics, it was my impression that lesions of the frenum and about the frenum were more likely to be syphilitic than are ulcerations due to other causes, as the Ducrey bacillus. More recently, I have attempted to confirm this impression and, at this time, am satisfied to deliver this preliminary report.

It has seemed that the frenum and the surrounding tissue, as it exists necessarily in those who had never been circumcised, was a *locus*

minoris resistentia. The frenum or, as it is popularly called, the "gee" string, has a blood supply which is possibly unique in that there is a central artery having few if any large branches and practically no tributaries. I have at odd times thought of sectioning for microscopical study a number of frenums, but have never actually done so.

I have seen syphilitic chancres at the frenum, usually to one or the other side of the "gee" string, as small as the size of the head of a pin, with ulceration already present. At times,

both sides of the string have been equally affected and, as this type of case advances, one has an undermining of the frenum itself, with frenal ulceration as a late result. When one side of the frenum has a lesion, it does not take long for the process to advance to encompass the frenum itself. The ulceration may advance in either of two directions, that is, either up along toward the meatus or back along the mucous surface of the prepuce. The ulceration may be flat, almost to be confused with an erosion, or it may be an ulceration with hypertrophic margins or even a marked border. Ordinarily, until the frenum is ulcerated through, there is little if any tendency for the ulceration to be deep, but, after the frenum has been destroyed, the ulceration at its site may be marked. When the frenum goes, there is usually a hemorrhage, but never in my experience has this been severe nor has it ever



Fig. 1.—Frenal Chancre

gone beyond the control of ordinary measures of hemostasis.

Differential Diagnosis

The patient with a frenal chancre may give two diverse clinical pictures along the course of his affection. If he should be so unfortunate as to have a redundant prepuce and be of less than ordinary cleanliness, the patient may never know of the apparently innocuous lesion until there is tremendous edema of the prepuce and the patient is unable to withdraw the foreskin. One of the earliest clinical lessons I learned was, that an acquired phimosis pos-

sibly meant a chancre hidden at the frenum, but also possibly elsewhere in the phimotic preputial cavity. In an earlier day of clinical differential charts, the following was prepared by Malsbary under the title of:

Subpreputial Ulceration in Cases of Phimosis Chancre

- 1.—Incubation ten to 40 days, usually 2 to 3 weeks.
- 2.—The ulcers are usually single. May be felt.
- 3.—Comparatively slight inflammation.
- 4.—The swelling is hard, dry and indurated.
- 5.—Scanty discharge, serous or serosanguineous; may become purulent as the result of secondary infection.
- 6.—There is no marked inflammation and ulceration of the preputial orifice save such as may be caused by secondary infection.
- 7.—Palpation may reveal the cartilaginous induration at the base of the ulcer.
- 8.—Multiple indolent buboes are the rule. Suppuration of buboes in cases of chancre is usually due to mixed infection.
- 9.—*Spirochaeta pallida* and Wassermann reaction. The latter is not present before the sixth week.

Non-Syphilitic Ulceration (Chancroid, herpetic, balanitic)

- 1.—Incubation less than a week, as a rule to be measured by hours, rarely more than 2 days.
- 2.—Multiple ulcers are the rule. At times these can be felt.
- 3.—Marked inflammatory reaction—heat, pain, redness and swelling.
- 4.—The swelling is more edematous in character.
- 5.—Profuse discharge, purulent, rarely streaked with blood, and infectious. Auto-inoculation is common, especially in chancroid.
- 6.—The margins of the preputial orifice are usually ulcerated, especially in chancroid.
- 7.—There is no such induration, save such as may be caused by inflammation, irritation or caustics or by a previous chancre.
- 8.—Buboes are usually absent and, when present, are single or double rather than multiple, and tend to suppurate.
- 9.—*Spirochaeta pallida* and Wassermann reaction absent, except in the presence of concomitant syphilis.

One feature of chancre within a phimotic prepuce, which has added a great deal of confusion, and which I have repeatedly met with in consultant practice, has been the patient with a known gonorrheal urethritis who develops a phimosis. The attending physician may not make any special note of this, believing that the phimosis is due to the inflammation of the gonorrheal urethritis, and may even allow the significant symptoms of adenopathy to pass by without regarding the possibility of an added infection, namely, the syphilitic infection.

Sometimes, the involvement of the lymphatic vessels by the chancre may be detected, espe-

cially on the dorsum of the penis. This is the indurated lymphangitis of Lang. It was first demonstrated to me by one of my early preceptors, Dr. Cornelius Seay. The affection of the lymphatic vessels usually does not persist as long as the affection of the lymphatic glands. Suppuration of these vessels is very rare.



Fig. 2—Frenal Chancre

One of our greatest difficulties, more marked in public practice, is the tendency of the patient to render self-treatment before applying to a physician for diagnosis. I have also had patients referred to me by other physicians who had advised application of mercurials to sores they desired to have searched for *spirochæta pallida*. In my experience, it has never been easy to demonstrate spirochetes from the frenal chancre and, when further difficulties in the form of mercurial ointments and washes have been added, the task is practically hopeless. I have elsewhere given a discussion of the dark-field procedure.

Diagnosis by Confrontation

I have revived, in a certain number of cases, the old procedure of "confrontation" for diagnosis. When feasible, in the absence of positive clinical or bacterial evidence of syphilitic infection, I have had the patient bring to me the sexual partner thought to be the cause of the lesions. When there has been exposure only to one, and the lady was willing to be examined, this method of diagnosis by "confrontation" has been of service. Unfortunately, all too often many disturbing factors intervene, even in private practice. It should be remembered; and I have myself been shown its efficacy in the practice of a physician in a small town where I spent several summers. He knew nearly all the girls and boys of the town and was pretty certain to have them call

on him when in trouble. Thus, for example, if one of the boys had gone to the city over a holiday, my friend would have him for a patient, after the proper interval. Then the small-town girl in the case would probably also be brought to him or, perhaps, another of the boys would drop in and say that he had been out with the girl who, the physician knew, had been going around with the first patient. In our rides about the town and neighboring communities, my friend would delight in recalling the ailments of those whom we passed, with the details of those from whom the infection was received and to whom and through whom it was passed along.

Therapeutic Diagnosis

Diagnosis by specific treatment has also appealed to me. I admit, it is indeed a dangerous procedure to charge a patient with syphilis



Fig. 3—Frenal Chancre

and initiate antisyphilitic treatment before there is clinical, bacterial, or serological evidence to sustain the physician. On the other hand, with intelligent patients and under exceptional circumstances, it has been thought wise to treat the patient for syphilis when he appears with an ulceration at the frenum, even if our laboratory investigations have been negative. The average patient of the casual type, who may visit the clinic or hospital, is NOT selected for this kind of work, as it requires the very cooperation which it is not possible to obtain even in the best regulated clinics. In the earlier day of clinical syphilology, this procedure was well thought of, and the therapeutic test appears in most lists of differential diagnostics in syphilis. A step along the same lines was taken some time back when my colleague, Dr. Leo Michel and I reported the scant literature, and our experiences with arsphenamin administered as a prophylactic to persons exposed to known



Fig. 4—Frenal Chancre



Fig. 5—Frenal Chancre



Fig. 6—Frenal Chancre



Fig. 7—Frenal Chancre

definite syphilitic infection.

The Ducrey Bacillus

I have had some experience also with the cultural demonstration of the bacillus of Ducrey as revived by Teague. The method is a good one, and the presence of the Ducrey bacillus worthy of laboratory effort and significant for records. But, in my opinion, it has not lessened the burden of the syphilologist in that the demonstration of the chancroid organism is in no relation to the presence or absence of the *spirochaeta pallida*. The fact that the lesion is bacteriologically a proven chancroid does not negate the possibility of the lesion being a mixed sore, that is, being both, a chancre of syphilis, and a chancroid. Rollet was one of the earliest exponents of this mixed infection idea.

It might not be amiss in this place to mention briefly the possibility of genital ulcer of long duration, with little or no subsequent adenopathy, and not followed by generalized symptoms, being still another disease which may be mistaken for chancroid rather than

chancre. I write of the so-called "Granuloma inguinale" or "Ulcerating granuloma" which I first encountered in the tropics, but which has been since frequently met with in temperate zones, and a regular deluge of reports from all parts of the United States has descended upon the medical press. It is important to keep this disease in mind, and that the organisms implicated be searched for in smears. Tartar emetic intravenously is a specific for this disease, when administered properly and for a sufficiently long time.

The possibility of carcinoma, tuberculosis, and gumma as requiring differential diagnosis should not be passed over in reviewing the clinical case, but it will not further be considered here.

The illustrations of this paper are from the collections of Goodman, and Parounagian and Goodman.

The Basis of Treatment of Typhus Fever*

By SOLOMON R. KAGAN, M. D., Boston, Mass.

Formerly Chief of the Zemstvo Hospital in Crimea and Government Physician in Typhus Districts in Rostov on the Don.

ON account of the absence, at the present time, of a specific remedy for typhus, the basis of the treatment of the disease must rest in the endeavor to obtain the following results:

1.—A decrease of the intensity and the consequences of the intoxication.

2.—An increase of the general vital tone in support of the patient's forces and his resistance, and a correction of the destroyed functions of the body.

3.—The prevention and the treatment of complications.

4.—A symptomatic treatment according to the indications.

Clinical observations have shown that the proposed abortive remedies (as, iodine, mercury, arsphenamine, etc.) neither cured nor improved. Hence, the only healing agent is the *vis naturæ medicatrix*. The most important effort in the treatment of this malady must be directed toward lessening the degree of intoxication. The most natural way is, of course, a forced injection of fluid into the body which causes the removal of toxin by the urine. It is logical that the fluid should be cool, good tasting, nourishing and isotonic to the gastric juices. Such a drink is possible to prepare artificially: Tartaric acid, 12 parts; Sodium bicarbonate, 13 parts; Sugar, 25 parts; Sig. $\frac{1}{2}$ teaspoonful to $\frac{1}{2}$ glass of water.

But it is also useful to apply additional methods for the same purpose: Systematic enemas daily have a great value in decreasing the concentration of the toxin (virus). The best fluid for absorption in the intestine is saline solution, 6.0 to 7.5%, or one teaspoonful of common salt to three glasses of lukewarm water that has been boiled. In severe cases, the saline solution (0.6%) is useful in doses of 600 to 1000 Cc. hypodermically. Some authorities recommended intravenous injection, but, according to my observation, this method is not advantageous; it causes shock, a rise of temperature and perspiration. Therefore, it is better not to apply it, unless in special cases where there is need for obtaining immediate effects.

The Treatment

In grave cases, sometimes, it is of benefit

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to remove 200 to 250 Cc. of blood, followed by hypodermic injections of saline solution. In cases of meningitis, a lumbar puncture with the withdrawal of 20 Cc. of cerebrospinal fluid is indicated. Hurwitz reported some severe cases of typhus where considerable relief was obtained by lumbar punctures removing thereby and lessening the toxin from the spinal canal and producing a lowering of the intraspinal pressure. (1)

Divanoff suggests that, in typhus, there is especially an infection of the thrombokinesis and nucleoproteids which the changes of the physical properties of the blood, the increase of its thickness, alkalinity and coagulation. Hence, he injected intravenously $\frac{1}{2}$ -% to 1-% solution of Sodium citrate, 100 Cc., from which a lowered coagulation and thickness is obtained.

The injection of 0.2-% solution of hirudin (10 Gm.) destroyed the nucleoproteid and the ferments, making them harmless. He observed that, half an hour after the injection of Sodium citrate, a marked cyanosis appeared, afterwards free perspiration and a drop of temperature to 36.5 or 36% (98.8 to 98° F.) lasting for two or three days. On the third day, the injection was repeated. The temperature fell again and did not rise, thus showing a marked general improvement. In his experiments, there were no deaths. It is worthy of further investigation.

Along with the action of disintoxication, attention should be paid to general symptomatic treatment and to supporting the forces of the patient by the proper tonics, hypnotics, hydrotherapy, hygienic conditions and proper diet, the latter to consist, as Hurwitz suggests of 50 to 60 Gms. albumin; 200 Gms. carbohydrates and 150 Gms. fats, or 1500 calories altogether.

Preventing Complications

Much care should be given to preventing complications. The hair should be cut close to the scalp and an ice bag put to the head. Proper ventilation and, sometimes, deep breathing and frequent changes of the position of the patient are of great value in the prevention of pneumonia.

A grave complication is parotitis which is mostly hemogenic and lymphotogenic. But, according to Marzinovsky, it is due also to in-

sufficient care of the mouth, thereby allowing the microorganisms to enter through Stenson's duct. To prevent parotitis, Floroff advises the eating of a piece of dry bread, for it markedly increases the secretion of the parotid gland and thereby interferes with the entrance of the microorganisms into the glands. This is based on Pavloff's experiment which has proved that the submaxillary gland reacts to any irritation, mechanical, chemical, and psychic, while the parotid gland has the peculiar property of responding especially to irritation caused only by dry bread or meat which, when taken into the mouth, produce an increased secretion by this gland. The sublingual glands react markedly to irritation by acid. Therefore, a mouth wash of boric acid solution, to increase the secretion of the submaxillary glands, is of benefit. Lobert suggested sulphuric acid, 1.0 to 2.0 Gms. in 120.0 Cc. of water. One tablespoonful every two hours, for the same purpose. (2)

To prevent bedsores, spirits of camphor or alcohol and careful drying are of great service. Special attention must be given to the heart action by usual cardiac stimulants, because the decubitus probably is due, not only to pressure but also to the thickness of the blood and to the retardation of the circulation. To prevent intense eruption, Ignatovsky recommended a 3-% solution of calcium chloride (four tablespoonfuls a day) (3); but personally, I never observed an improvement or diminution of the hemorrhagic rash from this mixture, although I prescribed it very often.

For the prevention of gangrene and thrombophlebitis of the extremities, it is imperative to keep the feet elevated, to apply hot bags to them and to give cardiac stimulants in full doses.

Prophylaxis

Concerning the prophylactic measures, strict isolation and disinfection are important, and measures to keep the lice away by cleanliness and by repugnant substances, such as mercury and tincture sabadilla, sprayed on clothes.

As to the use of vaccine for purposes of prophylaxis, the following methods were employed: (1) Nicolle's method: the serum of typhus patients; (2) Hamid's method: vaccine of citrated blood of typhus patients heated to 60° C.; (3) Neukirch's method: vaccine of leucocytes of the blood of typhus patients; (4) Rochazim's method: the vaccine of emulsion of typhus lice and of *Bac. proteus*. The experiments carried out by Slatagoroff, Klodnitzky, Marzinovsky, Rosnatovsky and the writer have proven that they are of no value. Before the virus is definitely isolated, it is difficult to prepare a valuable serum for prophylaxis. Therapeutically, however, the serum of immunized horses is of distinct service, since its employment by Nicolle, Potel, Poirson, Pavezits and Barikin has materially lessened the morbidity as well as the mortality.

562 Warren St.

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"Lo, the Poor Indian Doctor"

By BRUCE HOPPER, Billings, Montana

IN casting stones of self-righteousness at the glass houses of other nations, in the matter of expansion at the expense of weaker races, the United States as a government seems blissfully unaware of the fragile targets for the same kind of missiles existing in our own ordering of things. Indeed, the average taxpayer is so highly pleased with America's known efforts to aid stricken peoples of a war-devastated world that he is mildly surprised, though in no wise impressed, when some critical ally points to the obvious failure of America to apply to her own affairs the doctrines of human indulgence she prescribes for other sovereign powers toward their colonies or subject peoples. It remains for American travelers, particularly those who visit Japan, to learn that America's fine madness over

man's inhumanity to man is held at considerable discount by reason of the treatment given the only true American, the Indian.

Our Indian problem dates from the advent of the white man on the western Atlantic shore. It goeth on forever, and maketh sick the heart. In meeting that problem, we have been, at times, unreasonably selfish. Some success has been attained. And, yet, there are so many new features, so many sides to the question, previously hidden, that the task of establishing the Indian as a permanent stock looms as large as ever.

The most compelling want of the Indian, today, is an adequate medical service to prevent the hastening decay of the race. But, it is just that human want that the Government seems most reluctant to fill.

Modern developments in public health matters have changed the old points of view and have, to a large extent, invalidated arguments formerly relied upon in promoting Indian welfare. There has been, too, a decided change of sentiment. No one would now dispute the premise that the Indian has a right to the best care medical science can give. The advancing tide of white conquerors despoiled him of his God-given inheritance, changed his mode of living from the healthful freedom of the prairie and forest to the unsanitary restrictions of the reservations, generally far from the environment to which he was native. The white man deprived the Indian of his hunting grounds and nomadic life, but has not, thus far, taken adequate measures to instruct him how to combat the ills and infectious diseases which follow in the wake of agrarian or industrial civilization. How these diseases, imported and spread by the white man, have depopulated the Indian tribes, the records of our Indian Office can tell best. But, just how far and in what manner we have accepted the responsibility for destroying the Indian tribal health, no official has had the courage to make public.

It is no wild reach for justice to say that the time has come for white Americans to pay in full for the sins of their fathers. That the Indians are a dying race, is an unfortunate fact most Americans take with a shrug. And, yet, the preservation of the true American is a matter of profound concern to our posterity. What must be realized is, that such efforts toward preservation must be speedy to avail. If the Indian is to be saved, just as survivals of a once numerous race, heroic measures must be applied to his welfare. It depends upon the amount and kind of the present medical aid rendered within the next generation. Otherwise, with the present system of dilly-dallying in health matters, the Indian will become, like the buffalo, an almost extinct curiosity handed down from the early history of America.

Historical Retrospect

Official medical care of the Indian dates from 1849, when one physician was assigned to the service. A Division of Medicine was created in 1873, discontinued in 1877 and revived in 1909 as a section of the Division of Education in the Indian Office. Under the chief of the Division of Education is the head of the Health Section, a medical officer, designated as Chief Medical Supervisor. This latter official happens to be one of the best educated physicians in the United States, who

has had exceptional experience in public health matters here and in the Philippines, but is now partially a figurehead who holds his position as long as he carries out the orders of the Commissioner and his division chief. He can not be too aggressive.

The policy of the Indian Office at the present time seems to center on education and property rights of the Indian, with but little attention to real medical service, guaranteeing adequate local health administration.

It is extremely unfortunate for the health of the Indian that the Chief Medical Supervisor is not a commissioned medical officer and is subordinate to the Commissioner, a layman; and further, that the agency physicians are subordinate to reservation superintendents, also laymen. Like all laymen, these officials are rarely impressed or familiar with the importance of health matters. A monument to the lack of real concern of lay officials is to be found in the vital statistics prepared by the Indian Office. Records of sickness, births and deaths are indefinite and fragmentary. They have not the slightest value for drawing conclusions regarding Indian welfare. And the only advice which could be considered helpful, that of the medical officers, regarding housing conditions, food supply, social and personal habits, is rendered ineffective by lay control.

The U. S. Indian Medical Service

The first hospital for Indians was established in 1882. In 1888, there were four. This number was increased until 1920, when there were eighty-seven. The number fell off again to seventy-three in 1922, due to increased cost of maintenance and decrease in appropriations. In the majority of these hospitals, the lone physician who is in charge will be compelled to act at various times as physician, surgeon, eye specialist, tuberculosis specialist, pathologist and pharmacist. In one case known to the writer, the superintendent requires the physician to sweep and mop his own office and bring in the coal and wood.

The Indian Service has many vacancies for physicians, and it seems impossible to fill them. On January 1, 1917, there were 116 regular physicians in the service; on November 1, 1918, there were but seventy-nine. Of contract physicians, seventy were employed in 1917, and only sixty in 1918. The Indian Medical Service has been unable to keep the positions filled, because the best men do not remain in the service. The salaries are inadequate, the chances for promotion slight, and the rewards too meager to compensate

for the isolated life on the reservations.

Doctor Frederick L. Hoffman, one of America's leading statisticians, gives some eloquent figures in the *Journal of the American Medical Association* for August 14, 1920. He says in part:

"In Serial 6, of the Hearings of the Committee on Indian Affairs, is a table which may well bring the blush of shame to a government under obligations to provide proper Indian medical service, and in duty bound to afford those who are rendering such service a means of maintaining a proper standard of life. According to this statement, of the entire staff of physicians, other than the Chief Medical Supervisor, who receives a salary of \$3,000 per annum, only one physician receives a salary as much as \$1,800; four of \$1,600; one of \$1,500; twenty-two of \$1,400; ten of \$1,300, and seventy of \$1,200.

"Below the \$1,200 line are sixteen physicians who receive from \$1,000 to \$1,100; twenty-two who receive from \$700 to \$720, and seventeen from \$600 to \$650. Still lower payments may be assumed to represent the compensation of contract physicians.

"There are no pharmacists connected with the Indian Medical Service, although it is now held and recognized that physicians should not be expected to do their own dispensing or compounding, except in cases of emergency. There is no adequate dental service, the total number of dentists being less than ten, who travel from place to place over an area of vast extent. There is no adequate provision for eye specialists, although the Indian population is terribly afflicted with trachoma, introduced from the outside, largely because of neglect and indifference to the risk of infection."

Health Survey

Owing to the alarming spread of contagious and infectious disease among the Indians, principally tuberculosis and trachoma, and the increasing danger of infecting the whites on or near reservations, the United States Public Health Service conducted a survey in 1913. The conclusion drawn, and the recommendations set forth, are to be found in Senate Document No. 1038, 62d Congress, 3d Session, as follows:

1. Trachoma is exceedingly prevalent among the Indians and this prevalence was found (a) highest in Indian boarding schools, (b) less in Indian day schools, and (c) least among reservation Indians above and below the school age.

2. Tuberculosis is very prevalent among Indians. Although the conditions of the investigation did not permit the detection of all cases which might have been found with more extended opportunities, there is ground for belief that the incidence of tuberculosis among the Indians is greatly in excess of that estimated for the white population, and the undertaking of immediate means of relief is indicated.

3. Smallpox is little prevalent among In-

dians at the present time. Evidence was found that the Indian population is vaccinated with approximately as great degree of thoroughness as the rural white population.

4. Typhoid fever, contrary to expectation, is less prevalent among the Indians than among the whites. There was no evidence that other infectious and contagious diseases are more prevalent among Indians than among the white population.

5. The conviction can not be escaped that the Indian boarding schools have been an important agency in the spread of trachoma.

6. The sanitary conditions on reservations are, on the whole, bad and require improvement in housing conditions and habits of living.

7. The primitive Indian requires instruction in personal hygiene and habits of living, especially in stationary dwellings, and practical education in such matters must be made the basis of future advancement.

8. The social habits of Indians (visiting, dancing, etc.) may serve to spread any communicable disease present among them.

9. The presence of numerous flies on reservations is believed to be a factor in the spread of tuberculosis and trachoma.

10. The sanitary conditions in most Indian schools were unsatisfactory because of one or more of the following conditions: Overcrowding, inadequate equipment, imperfect sanitary supervision, and lack of observance of necessary sanitary precautions.

11. There is danger of the spread of tuberculosis and trachoma from the Indian to other races by reason of the increasing intercourse taking place between them.

12. Due care is not exercised in the collection and preservation of morbidity and mortality records at many schools and agencies. Such records are the foundation of public health work.

13. The medical branch of the Indian Office is hampered in accomplishing effective work in curing and preventing diseases, (a) because of insufficient authority in medical and sanitary matters, (b) because of existing obstacles, such as racial characteristics, present economic status of the Indian, and varying physical conditions on reservations; (c) because of inadequate compensation, absence of reasonable expectation of promotion, lack of esprit de corps and coordinate organization.

14. Present measures for the sanitary betterment of the primitive Indian are not, in many instances, adapted to his needs and conditions of life. In devising practicable sanitary measures, account must be taken of his racial status.

15. In any event, the suppression of tuberculosis and trachoma among Indians will be difficult. Long continued efforts and the expenditure of considerable funds will be required.

To Inaugurate Reforms

Many of our people are aware of the appalling failure of the government to protect the health of the Indian. Some years ago, a letter from ex-President Taft was published in the report of a former Commissioner of

Indian Affairs, which includes the following paragraph:

"The present conditions of health on Indian reservations and in Indian schools are, broadly speaking, very unsatisfactory. In many parts of the Indian country, infant mortality, tuberculosis and disastrous diseases generally prevail to an extent exceeded only in some of the most insanitary of white rural districts and in the worst slums of our large cities. On the Kiowa, Commanche and Apache reservations seventy-one percent of the school children have trachoma. Of the 7,000 Indians of the Pine Ridge reservation, South Dakota, over one-fourth have tuberculosis. . . . As guardians of the welfare of the Indians, it is our immediate duty to give to the race a fair chance for unmaimed birth, healthy childhood, and a physically efficient maturity. . . . While there are many efficient and self-sacrificing physicians in the service, the smallness of the salaries, which average only \$1,186 a year, necessarily affects the qualifications and ability of the physicians engaged. The Indian Medical Service should therefore be substantially increased in size, and should be lifted to efficiency through better men and women, whom, as a rule, only better salaries can command."

Opposed to the just attitude of broadminded men who have investigated the status of the Indian are the chronic detractors who cry pish and poo, also bah. These latter are the most articulate, unfortunately, so that the belief is current that the Indian is the spoiled child of a paternal government. Let it be said, however, for those who covet the Indian lands, that they have the prejudice natural to avarice and spoliation. Their opinions are colored by the inevitable contempt which follows judging a native race by white standards of industry and morality.

And, yet, it needs no great gift of philanthropy to realize that America owes more to the Indian than has been given in the past. The only possible means of providing the Indian with proper medical care is to attract to the service men of sufficiently high caliber to combat and overcome the diseases now ravaging the race. As pointed out, the salaries are too low to hold for long the skilled physicians needed, although the service has been distinguished by many self-sacrificing men devoted to their work. These high-minded workers, through the utter futility of past efforts, have given up hope for effecting the desired improvement from within the Indian Medical Service. As in other departments of the government, politics play an important part.

The Sad Lot of the Doctor

The lot of the Indian Service physician is one which would excite the deepest sympathy of men in the profession elsewhere, were the

facts fully known. Already, such organizations as the Association of Government Surgeons, American Laryngological Association, Colorado State Medical Society, Philippine Medical Association and Medical Society of the Isthmian Canal Zone have passed resolutions asking for far reaching reforms in the Indian Medical Service. These doctors live in semi-exile, beyond the refining influence of civilization, and removed more and more definitely from the sources of inspiration as the slow years pass. Professionally, they lose touch with the progress made by research in the clinics and laboratories of our scientific centers.

Being human, the doctor longs to return to the people of his blood and racial sympathies, to take up the burden of private practice. But, he has lost step with the rush of events, and is bewildered by the struggle of competitive existence. Furthermore, he is a specialist, having spent the best earning years of his life in treating specific diseases and the trying conditions of an Indian reservation. He is like a fish out of water. So he turns his face again to the wilderness, where the children of the forest live in the out-of-doors within the eternal sound of running water. He has sacrificed his high ambitions for achieving a place among the stars of his profession. He has given up his hopes for a home. His salary continues at about \$1,200 a year. Should he want an annual vacation, he must furnish and pay a substitute during his absence. He has faced death many times in the remote places, and performed heroic service, account of which never reaches the records, much less inspires a word of thanks. And he has been swept from his moorings by the fickle winds of political fortune so long that he is nothing but a floater, denied friends and comforts, by his wanderings.

What to Do

Thus the Indian physician. What must be done for him comes in the field of politics. Persistent efforts have been put forth by friends of the Indian Medical Service to have the salaries made commensurate with the modern scale of living, if not actually with the sacrifices involved. It is now apparent to all who have taken the trouble to investigate, that such a transformation can come only by transfer of the Indian Medical Service from the Bureau of Indian Affairs, with its lay control, to the strictly medical United States Public Health Service. With such an eminent physician as Dr. Hubert Work heading the Department of Interior, the service physicians

feel confident that they would not be opposed to such a transfer.

If such a transfer were made, the corps of physicians could serve, either as medical officers of the Public Health Service, or as a distinct corps under the direction of the Surgeon-General of that service. It would then be possible to train physicians for the special problems they encounter on the reservations. It is a curious inconsistency that Army and Navy physicians receive special post-graduate work in the Army and Navy medical schools of Washington, while men are assigned to posts on Indian reservations, who never saw Indians, who know nothing of the peculiar characteristics of the race, and who learn only by the mistakes they make.

With the splendid organization of the U. S. Public Health Service applied to Indian affairs, there would be some hope of saving the Indian. It is now a question of life or death, for, unless steps are taken, there will be no further need of even the ineffective Indian Medical Service within our generation. The Indian is passing into history.

From a recent report of the Committee of One Hundred (Document No. 149, 68th Congress), appointed by the Secretary of the Interior, the following extracts are taken:

"In 1920, the medical officers of the Indian Service, after examining 68,718 Indians, estimated that 24,773 had tuberculosis, latent and active, and 30,795 were afflicted with the dreadful, but preventable, eye disease, trachoma. Tuberculosis kills; trachoma, unchecked, ends in blindness, as the many blind men and women on Indian reservations can testify."

"The annual reports of the Commissioners of Indian Affairs for many years have deplored the insufficiency of the Indian Medical Service. They again and again called the attention of Congress to the paltry salaries of Indian Service physicians, to their unattractive living and working conditions, to the inadequacy of the hospital equipment, and to the need of more trained nurses. But Congress, while increasing the general appropriation for health work, has refused to authorize an increase in physicians' salaries and Congress is the only source of authority for this increase . . . The professional men detailed to attend to the health of Indians get less than day laborers in the District of Columbia are paid."

"Ostensibly, the Indian Medical Service has for its head a physician with the title 'chief medical supervisor.' Actually, he is subordinate of the chief of the education di-

vision of the Indian Office, who is not a physician. The chief medical supervisor, in fact, is but little more than a traveling inspector. He spends much of his time in the field and is under orders of the chief of the education division, who, under the commissioner, is the actual head of the Indian Medical Service. In this way, the medical service, so far as its general supervision is concerned, is tied up with the management of the schools, the encouragement of agriculture, the bettering of the breeds of Navajo sheep, etc. . . . It has been urged that the medical service should be reorganized into an independent division presided over by a chief who would be a physician; that he, under the general supervision of the commissioner, should have independent charge of all health work in the Indian Service; that all Indian Service physicians should be made public health officers and be absolutely independent of superintendents, to whom they are now subordinate, reporting only to the chief of the medical service."

It is to be hoped, some benevolent force, that applies so much pressure and persuasion to bring medical relief to the famine and plague-stricken nations, will eventually turn a kindly eye upon the tragic need of our own protégés. It is a blot on the picture of generous America, a stain that is widening and becoming darker.

Whether the tragedy goes to its final curtain with obliteration of the Indian or is arrested in its horrible unfoldment, depends upon the medical aid rendered. Highly skilled physicians, possible only in a service of adequate salaries, freed from lay supervision, such as the U. S. Public Health Service, seems to be the only answer. The time has come for America to pay.

(The table of salaries given below shows the comparatively high salaries paid Aides, Nurses and Teachers under the U. S. Veterans Bureau. Compare these salaries with the salary received by the Indian Service doctor.)

<i>Designation</i>	<i>Entrance Salary</i>
Aide, Occupational Therapy.....	\$1,680 per annum
Aide, Physiotherapy.....	1,680 " "
Head Aide	1,800 " "
Assistant Chief Aide.....	2,000 " "
Chief Aide	2,250 " "
Nurse	1,680 " "
Head Nurse	1,800 " "
Assistant Chief.....	2,250 " "
Teacher, Vocational.....	1,600 " "



The Evolution of Chronic Diseases Of Non-Contagious Origin

Their Cure by Entero-Antigens

By B. SHERWOOD-DUNN, Nice, France

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[Concluded From March Issue, page 233.]
The Cause of Chronic Diseases

The organism can nourish itself on foreign albumins only in case it can assimilate them, can transform them into albumins of its own species; and we know that, to do this, it can absorb them only in the completely disintegrated state of the amino-acids. This disintegration is the role of gastrointestinal digestion. *What then becomes of the incompletely digested albumins which have penetrated into the interior of the organism in the colloidal state? They can neither be assimilated nor eliminated in the colloidal state.* They therefore create a condition of anaphylaxis which is the first deviation from the normal nutritive interchange in the system, and a continuation of which finally manifests itself in some form of chronic disease.

Every organism possesses for every normally digestible albumin a certain normal affinity (and this is not surprising, since every albumin is constructed on the same plan and belongs to the same chemical family) or a certain dose of normal affinity for a certain dose of albumin, but this affinity is circumscribed and strictly limited.

If the dose of albumin antigen injected is strictly equivalent to or less than the dose of normal affinity, every antigen injected will be fixed by normal antibody, digested, assimilated or eliminated, and the organism will continue to reproduce and multiply this normal affinity-antibody which then will become the antibody in excess. If the injected dose of albumin, or antigen, is greater than the dose of normal affinity, the antigen will fix itself to the normal antibody in excess and will circulate in the blood up to the time when the organism can produce a quantity of antibody-sufficient to fix and digest this excess of antigen. Failing in which, this excess antigen becomes the cause of some form of chronic manifestation.

(Here is found one of the principles underlying the treatment of these chronic manifestations by the entero-antigens of Danysz. These antigens act to cause the production of the excess antibody necessary to eliminate these antigens which, acting as foreign bodies, are the cause of these chronic manifestations).

In this way is explained quite easily a fact which until now has seemed inexplicable. We know that, if a small injection of antigen causes an excess of antibody and the anaphylactic state to appear in ten to fifteen days, the injection of a large quantity of the same antigen into an animal of the same species will produce the same effect only after an incubation period of some weeks or even months, simply because the existence of an excess of antigen in the circulation excludes the possibility of the simultaneous existence of an excess of antibody in the organism.

We may thus affirm that the basis for the production of antibody in excess is the obligation to digest colloids, under which the organism finds itself in order to assimilate or eliminate these colloids. We know that this digestion will produce pathologic manifestations when the combination of antigen with antibody causes a precipitate; but, on the contrary, when this compound is soluble, this digestion is completely harmless.

Cells, tissues and organs of the body are adapted only in a certain measure to this irregular function of digestion and in a given time can transform only a certain quantity of albumin or foreign colloids. Each time that a cell is called upon to fix a quantity of a substance to be digested in excess of that it can easily perform, there will be intracellular indigestion which disturbs the vital functions and the normal physiologic state of the cell for the reason that there is no method for the evacuation of the undigested surplus.

When an antigenic colloid is introduced into the system, one of two things happens: The colloid is transformed by the antibody into component parts suited to the cellular use, so they can be assimilated and eliminated. Failure to accomplish this leaves these antigenic colloids to circulate in the system causing some form of chronic disease.

All the pathologic symptoms caused by an antigen, which are manifested in the organism at the time when it combines with the antibody in excess, are anaphylactic in nature. A crisis of anaphylaxis is nothing more or less than a crisis of cell indigestion. The disturbances are produced by a sudden rupture of the

normal equilibrium between the state of gel¹ and the state of sol² of those colloids found in the cells and in the blood. When this condition is intravascular, the disturbance will be rapid and immediate. When it is intracellular, the disturbance and lesions which result may last for days or dozens of years assuming the form of one or more of the forms of chronic disease (chronic anaphylaxis).

We know that any heterologous albuminous substance which, undigested or incompletely digested, in the form of albumose, peptone, or polypeptid has penetrated into the blood will act as an antigen, and we know that any ordinary occurrence, even a slight emotion, can make the intestinal mucous membrane permeable to these antigens permitting them to enter into the circulation.

We are thus led to naturally assume that, in all cases of chronic disease of unknown origin, the primary cause of the lesions and of the apparent symptoms rests in an anaphylactic state brought about by an antigen. The rational treatment then is to be found in a like antigen. But, as there is an infinite variety of antigens rendering the determination of the exact causative antigen in each case extremely difficult, we are led to employ a heterologous mixture of antigens in the treatment of these cases.

The Cure for Chronic Diseases

From the facts determined experimentally and from the whole of these deductions we can conclude that:

1.—Chronic disturbances of nutrition, which manifest themselves in various forms of chronic diseases, have for their common cause a state of anaphylaxis.

2.—This state of anaphylaxis is caused by the introduction into the blood of bacterial or albuminoid antigens. Most if not all non-contagious chronic diseases have, as a primary cause, *antigens of intestinal origin*, as has been shown by the extensive experimental work of Metchnikoff upon the intestinal flora; as a *determining* cause, the anaphylactic state of certain tissues; as *exciting* cause, the reflexes of the nerve centers.

3.—The resulting illnesses may be successfully treated by antigens taken from the normal intestinal flora. This treatment is neither anti-infectious nor antibacterial, but solely *antianaphylactic*.

¹Gel: A colloid which is firm in consistency though containing much liquid; a colloid in gelatinous form.

²Sol: A colloidal solution in which the mixture is liquid.

The mechanism of antianaphylaxis can be explained in two different ways.

1.—As a specific neutralization of the antigen by the excess antibody.

2.—As a reflex action of the nerve centers on the intracellular metabolism caused by the selective action of certain antigens on the nerve centers regulating cellular nutrition.

The production of excess antibody results in hypertrophy and in lesions of the organs the reactions of which maintain the normal functions of the organism.

These lesions of necessity depress the functions of these organs, and it is solely in these more or less pronounced depressions that the direct or indirect causes of the lesions of skin, digestive apparatus, joints, lungs, circulatory system and nervous system (such as anemia, arteriosclerosis, rheumatism, gout, obesity, eczema, scleroderma, psoriasis, acne, urticaria, constipation, neuroarthritis, neurasthenia, asthma, emphysema, hayfever, catarrh, migraine, insomnia, chronic diarrhea, melancholia, dyspepsia, menorrhagia, dysmenorrhea, leucorrhea, troubles of the menopause, tuberculosis of the skin and glands, and other disorders of a chronic character) are to be found.

All of these facts lead us to believe that all the forms of chronic diseases of non-contagious origin, appearing in the human subject, are caused by antigens, and in antigens we will find the cure.

The work of Roger, Josué, de Delezenne, Bosc, de Gley, and Lebas (1893-1907) upon the reactions produced by the peptones, the extracts of different organs and microbial bodies, has shown that the anaphylactic attacks can be prevented by the injection of non-specific antigens.

In 1911, Renaud observed an appreciable curative action following the injection of anti-syphilitic vaccine in abscesses, peritonitis and osteomyelitis. Weiss treated with success cases of iritis, ophthalmia, blennorrhagia, and articular rheumatism by the injection of cow's milk. Weill, of Lyon, has employed human milk in the treatment of milk intolerance in nursing women. Injections of from one to ten Cc. of boiled milk, in spite of some local reaction, cured dyspepsia, diarrhea, constipation and certain cases of insomnia and nervous manifestations. Peptone was successfully employed by Pagniez and his collaborators in the preventive treatment of urticaria and the dermatoses. Instances could be multiplied indefinitely of the successful employment of non-specific antigens.

The Discovery of Entero-Antigens

These favorable results prompted Professor Danysz, of the Pasteur Institute, who for many years was a collaborator with Metchnikoff, to institute a line of experiments to discover if there were not serums which, used singly or in combination, might be put into general use as a remedy for the chronic diseases of non-contagious origin.

These experiments were carried out in conjunction with Sabouraud, Casin, Dalimier, Dominici, Labonnette and Raspail and covered a period of years. Of all the non-specific antigens employed in this wide field of experimentation, the antigens prepared from the isolated microbial cultures of heterogeneous, polyvalent, non-pathogenic microbial bodies selected and isolated from the normal intestinal flora, sterilized by heat, showed the most constant curative action (1).

The sum of the researches in the etiology and nature of chronic diseases, inspired by the whole of the preceding work, has resulted in the discovery and application in practice of a non-specific but selective bacteriotherapy based upon the following considerations:

1.—A congestion of the gastrointestinal mucous membrane may be the cause of the passage into the blood of incompletely digested albumins (bacterial or alimentary) which act as antigens.

2.—Every antigen heterogeneous to the organism will cause a state of immunity to anaphylaxis that is more or less harmful.

3.—Every specific or curative antigen (vaccine therapy, antianaphylaxis) will prevent or cure these diseases.

4.—In order to cause a minimum of harmful result and a maximum of curative result, it was necessary to look for groups of antigens for groups of diseases which present a group of characteristic symptoms in common.

The preparation which showed itself the most efficacious in the greatest number of cases was a mixture of six different species of microbes. Two strains of bacterium coli, one of bacterium proteus, one of enterococcus, one of streptococcus, one of staphylococcus.

The choice of the strains of each one of these microbes was made after experiments to show which was the most active; certain strains of bacterium coli, of proteus, of enterococcus and staphylococcus were shown to be much more active than others.

The long periods of experiments also brought out the fact that these microbes were

(1) Danysz, J., *Traitement des maladies chroniques non contagieuses par les antéro-antigènes*. *Bulletin Médical*, No. 10, 18 Février, 1920.

not equally active in the treatment of different forms of chronic affections; that the proportions of different species as well as the quantity of microbial bodies had to be changed in the treatment of psoriasis as compared to that of a case of enteritis or a case of asthma.

As a result of these extended experiences, Professor Danysz was led to make three different mixtures of bacterial bodies.

Preparation Number 1, for psoriasis and the different forms of dermatoses, is composed of a mixture of microbes chosen after the treatment of 25 cases of psoriasis of different degrees of gravity and contains one strain of Bacterium coli, one of streptococci and one of enterococci, one of sarcines, one anaërobic and spores.

Preparation Number 2 is composed of six species of microbes chosen after the treatment of more than 500 cases of chronic affections (asthma, rheumatism, neurasthenia, scleroderma, gastrointestinal troubles, insomnia, melancholia, catarrh, menorrhagia, dysmenorrhea, leucorrhea, troubles of the menopause, anemia, etc.)

Preparation Number 3, for the treatment of chronic manifestations of tuberculosis of the glands and the joints, is composed of the same mixture of microbes as preparation No. 2, with the addition of tuberculin (150 millionth of tuberculin to the Cc.).

All of these preparations are put up in glass ampules containing 1 Cc. of enteroantigens, sterilized by heat at 65° C.

Ampules No. 1 are sterilized at 100° C. and they contain 3/1000 of a milligram of dried microbial bodies by weight to the Cc.

The ampules 2 and 3 contain 1/100 milligram of dried microbial bodies to the Cc.

The preparation No. 3 is administered exclusively in the form of hypodermic injections.

The preparations No. 1 and 2 are produced in two distinct forms; one for administration by mouth, the other for hypodermic injections.

There are no contraindications for the employment of the enteroantigens in the treatment of any of the chronic diseases of non-contagious origin, in the absence of fever.

Report of Cases

Out of the thousands of those cases that have been treated in France, at the Pasteur Institute, and those in my private practice for the past two years, I will give only the two following cases, but will furnish any number to any of my correspondents desiring them.

Chronic Eczema of the Face and Hands.—Maria R., age 22, entered the Hôtel Dieu de Poitiers, the 2nd of November, 1920. Attended

by Doctor R. B., professor of the Medical School of Poitiers.

A slightly moist eczema at the base of the nose, base of the ears and upon the cheeks. Dry eczematous patch upon the dorsal aspect of hands and fingers. The present condition has existed for three months and has been treated by different topical applications, without result.

November 3, the patient received a first injection of $\frac{1}{2}$ Cc. of enteroantigens. One hour after the injection, the patient complained of a violent headache which persisted during the whole of the night and prevented her sleeping. There was no appreciable change in the condition of the eczema.

November 5, second injection of 1 Cc. made at 11 A. M. This injection was well tolerated, without reaction or malaise of any kind.

The following morning, an amelioration of the eczematous condition was noted. The moisture had disappeared from the patches on the face and those of the hands had lost their appearance of inflammation.

November 7, third injection of 1 Cc.

The eczema of the face was dry and the crusts on the hands were desquamating in patches.

Fourth injection the 9th; fifth on the 11th; sixth on the 13th.

The crusts had fallen off. There remained only the red patches where they existed.

Eighth injection the 15th; ninth the 17th.

The patient was pronounced cured and left

the hospital.

No other treatment than the above was practiced upon this patient.

The sweating eczematous patches were dusted with oxide of zinc powder, the first 24 hours.

No difference was made from the ordinary régime of the hospital.

Neurasthenia.—A young married woman, whose husband had been killed in the war, three years previously.

She suffers from neurasthenic insomnia; she has received no benefit or relief from the ordinary soporific remedies. Great mental depression; hypersensibility to slight emotions; melancholia; incapable of occupation; is a highly cultured musician, but cannot bear to touch the piano. Spent the season at a watering place without success.

An analysis of the intestinal flora disclosed coliform bacilli, a small coccus forming small punctiform transparent colonies upon gelose. *Bacterium subtilis* rare.

After the second injection of $\frac{1}{2}$ Cc. of enteroantigens, the patient secured a very good night's rest. After ten injections, separated by two days each, the patient claimed that she felt perfectly normal. She resumed her music and ordinary social occupations, which were maintained for six months, this being the last time at which she was seen.

54 Bd. Victor Hugo,

Nice, France.

Diphtheric Vaginitis During Puerperium

By GILBERT FITZ-PATRICK, M. D., F. A. C. S., Chicago

Obstetrician, Chicago Polyclinic and Henrotin Hospitals

ALTHOUGH the occurrence of diphtheric infections of the vagina during the puerperium is not rare, yet the subject is sufficiently interesting to warrant the publication of cases observed, especially when the findings are substantiated by bacteriological evidence, as the number of cases reported with such evidence is comparatively small.

The occurrence of true diphtheric fever during the puerperium was first demonstrated by Bumm, in 1895, by the culture of the Klebs-Loeffler bacillus from smears, and its successful treatment by antidiphtheritic serum. In 1908, Cuthbertson collected 22 cases from the literature and reported a personal case in which the occurrence of diphtheria bacilli during the puerperium was proved bacteriologically. Since then, a number of similar

cases have been reported, some of the most recent reports being those of Wauschkuhn, Haupt and Lang. Prior to Bumm's report, many cases have been reported, which were no doubt diphtheric infections according to the clinical descriptions, but they were not supported by bacterical proofs.

I have recently observed two cases of this kind of which the following are short summaries:

CASE 1.—Mrs. F., primipara, age 22 years. Seen by me in — Hospital, December 16, 1920, on the eighth day of puerperium.

History: Chills and fever beginning the second day; temperature ranging from 101 degrees to 103.8° F.; pulse 100 to 130; respiration averaging 24; poor appetite; sleepless.

Examination: Skin moist and clammy;

tongue coated; teeth in fair condition; thyroid, heart and lungs show no pathology except for some tachycardia. The abdomen was slightly distended; fundus of uterus three fingers' width below umbilicus and soft; some deep ilioinguinal tenderness. Vaginal exploration showed the perineum slightly lacerated, and small traumatic areas were noticed through the vaginal tissue, including a lacerated cervix. These lacerated traumatic areas were all covered with grayish patches which, when removed, left a bleeding surface. There were no grayish patches except those on the lacerated areas of the perineum, vagina and cervix.

Having previously seen such cases, I was instantly suspicious of Klebs-Loeffler bacillary infection. Cultures and smears confirmed this diagnosis. The attending physician knew of no cases of diphtheria in the hospital, nor had he been in attendance upon any such cases.

CASE 2.—Mrs. W.: This patient was seen at the same time and in the same hospital. She was a ii-para, 30 years old, with some mental symptoms, emaciated, and in the twelfth postpartum day.

The chief symptoms in this case were similar to those of Mrs. F., but were subsiding. Examination revealed a similar pathology, though more advanced in the parturient tract. Some of the grayish patches had exfoliated and the lower areas were granulating satisfactorily. Smears were taken and cultures made, with positive findings of the Klebs-Loeffler bacillus.

Upon investigation, the Superintendent of Nurses admitted that they had a case of diphtheria in the hospital, it being in the obstetrical nurse who had attended these two women in the confinement room. In those two cases, therefore, there is direct evidence of the source of infection, as no history of previous diphtheric infection could be obtained from the patients themselves.

Diphtheria antitoxin was administered to both, Mrs. F. and Mrs. W., both of whom convalesced from their diphtheric vaginitis with a satisfactory termination of the puerperium.

In addition to the two foregoing hospital cases, I have observed another one in my private practice:

CASE 3.—Mrs. X., a iii-para, 32 years old.

The diphtheria carrier in this case was a playmate of the parturient's 6-year-old son, the boys playing together in the two homes up to the time of the appearance of the chills

and fever. This woman had been delivered the second day after the diagnosis of diphtheria in the neighbor's child and, when I first saw the case, five days later, some lacerated areas in the parturient tract were thinly covered with grayish patches. Upon investigation, I learned that the child with diphtheria and the parturient had been attended by the same physician. Further, seeing the intimate playfellow relationship between the boys in the home of the parturient up to two days before the delivery, I made a diagnosis of diphtheric vaginitis. Cultures and smears demonstrated the Klebs-Loeffler bacillus and diphtheria antitoxin was administered at once.

These three cases are very interesting from the fact that the source of the diphtheria infection in each of them could be directly traced.

Frequency of Diphtheric Infection

In many of the recorded cases of puerperal vaginitis, the bacilli appear to have been existing in the vagina at the time of labor. Lönne and Schugt examined 209 vaginal smears for diphtheria bacilli. These included 58 apparently healthy gravid women and 30 cases with retroflexion or other lesions. In none of these cases were they able to find true diphtheria bacilli, although spurious diphtheria bacilli were found in 45 of the smears.

On the other hand, Wauschkuhn made smears from the breasts, tonsils and vaginas of 200 parturients in the delivery room and from the noses of the 200 infants just after birth. Of 800 smears so taken, suspicious bacilli were obtained in 89. Twenty-six mothers and four infants gave unmistakably positive findings. In the 26 mothers, vaginal smears contained the diphtheria bacillus six times. In all the four mothers, whose infants showed diphtheria bacilli in the nasal secretions, the vaginal smears were positive. There were no evident symptoms of diphtheria in any of the 26 mothers.

A parturient may convey the bacillus from the nasal region by her own hand to her vagina, and this was probably the etiology in a case reported by Haupt.

Diphtheritic invasion does not appear to occur in any particular period after confinement, and in Cuthbertson's recorded cases the times of appearance varied from the third to the twenty-sixth day. The appearance of the gray membranes is usually accompanied by fever, and the condition therefore simulates true puerperal fever. Treatment of diphtheria

infection almost invariably yields to the specific antitoxin and, in Cuthbertson's 23 cases, 22 recovered after this treatment.

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The Technic, Indications and Contraindications

for the Use of the Pneumothorax Machine

By J. A. DUNGAN, M. D., Greeley, Colorado

IT is taken for granted that, in what shall follow, the reader will understand that all references herein are made to an air- or gas-insufflating machine used for the purpose of compressing by that means a portion of one or both lungs, or for the complete collapse of one lung.

This air, filtered in passage and being driven through the tubing and the needle by some species of gravitating object, usually fluid, enters freely the pleural cavity, dilating the latter and thus compressing or collapsing entirely the lung substance. Then no respiratory air can enter the compressed air cells and, perforce, rest to those tissues ensues. An air-splint has been applied to the lung and compression of tissue has taken place to so considerable an extent that even a bleeding vessel is so flattened as to stop further hemorrhage.

The first use of the pneumothorax machine seems to have taken place in Italy, being advocated by Forlanini. In 1896, the late Dr. John B. Murphy urged its application in this country. Ten years later, Brauer became an ardent convert in Germany, but it may be said that not until the illuminating article by Floyd and Robinson in this country did the instrument become a well established therapeutic agent, since which event it has become increasingly popular.

Technic

The needle used may be sharp or blunt-pointed as desired. It may have the opening upon the side or at the end. Personally, I make use of one having a sharp point with the opening in the end. It should, previous to use in artificial pneumothorax, be thoroughly sterilized, together with the rubber tubing, especially those parts of this tubing which contain filters of cotton.

The site upon the skin where it is determined to insert the needle is sterilized by iodine and, later, alcohol. A cubic centimeter of a 1-percent solution of butyn in sterile

water is then injected endermically and hypodermically, after which the same needle is pushed down an inch or so and more of the solution injected deeply between the ribs and if possible into the pleural membrane. After waiting a few moments (usually a minute is long enough), the pneumothorax needle is cautiously introduced along the anesthetized tract. It will be well to guide the needle between the ribs, if anything, bearing towards the upper border or just missing the upper border of a rib. In this way, injury to the intercostal arteries may be avoided and, especially, the intercostal nerve, which runs along the lower border of the ribs, will be protected. The first sensation of pain complained of by the patient will probably be, when the needle comes in contact with the pleural membrane. However, this is but momentary and is indeed not noticed if the anesthesia has been thoroughly done. At any rate, the needle is pushed or thrust farther, when it will be found to have entered the pleural cavity; providing, of course, that the case is well selected and that no preventing adhesions are found.

In order that the fluctuation of the fluid in the manometer may give immediate indication that the point of the needle is within the pleural sac, it need not be pointed out that the track from the needle to the manometer must be clear; i. e., that all pet-cocks, or thumb-release clips, shall be open between these two points, and all others closed. Fluctuation of from 3 to 10 degrees in the manometer may be taken to mean that the needle is within the pleural cavity, the amount of fluctuation in the manometer indicating, as well, the size of the cavity entered, as in some cases a lung abscess may have walled off the portion entered, by adhesions, from the general cavity of the pleura.

In the afore-mentioned connection, it is a point in favor of the earliest admissible use of the artificial-pneumothorax machine that, to wait longer, may mean that nature has in-

troduced the only method of splinting that she has at hand and has formed limiting adhesions which, in about half the cases otherwise amenable to this treatment, results in putting the case out of the reach of this highly efficacious treatment.

As soon as the pleural cavity has been entered and fluctuation in the manometer shows that air may now be turned on, at once the needle should be stabilized at that depth by an assistant and held there, the pet-cock, or thumb-release clip guarding the manometer tube is closed as, otherwise, the air or gas would proceed into the manometer, this being the line of least resistance, and blow the fluid out of it.

At the same time, the assistant should open the pet-cocks, or thumb-release clips, guarding the tract from the needle to the gravity apparatus, so that air or gas may now flow freely.

We are to suppose that we have at our command at least one thousand cubic centimeters of air or gas, though we may not use all of it at the first sitting. Indeed, 500 Cc. is usually ample and, often, I do not employ more than 50 Cc. This plan makes for added safety to the patient, and the results otherwise are in fact improved, even though subsequent administrations of air or gas may be indicated. I have found that frequently the administration of only 50 Cc. of air or gas into the pleural cavity is sufficient to stop a persistent hemothysis.

As soon as sufficient air or gas has been administered, the air line is closed off by pet-cock, or thumb-release clip. Collodion and cotton being ready in the hands of the assistant, the needle is now quickly withdrawn and the point of entrance thoroughly sealed.

If the needle at first has entered merely a portion of the pleural cavity which has been already walled off by adhesions, another favorable site may be selected and the procedure carefully gone through again.

The ordinary indications obtained by means of percussion and auscultation, such as for instance a deepened auscultatory tone as of respiration heard through the medium or freely movable pleural walls, or a deepened resonance discovered on percussion, will usually suffice to disclose a favorable site for the insertion of the needle.

This latter part of the apparatus is supplied with a stylet which may be used to clear out the canal of the needle, should this become plugged up during the operation, with blood or detached tissues.

The hypodermic administration of a $\frac{1}{4}$ gr.

of codeine may help the patient to endure a pneumothorax operation without coughing.

The Indications

Since the year 1913, the uses of the pneumothorax machine have undergone a considerable widening-out process so that, while, at first, the treatment was only considered applicable to unilateral cases of tuberculosis of the lungs, and then only for passive lung hemorrhage, it has now attained the reputation of being a reliable agent for double cases (though, of course, in this case, each lung is only partially collapsed, so that, between the two, enough air space to maintain life be secured) of lung tuberculosis, with or without hemothysis, lung abscess and for bronchiectasis.

Perkins and Burrell reported, in the *London Lancet*, in March of 1923, seven cases of abscess of the lung treated by artificial pneumothorax. Of these seven cases, six completely recovered. While the seventh case resulted fatally, the death was not the outcome of the application of the treatment, but due to a surgical operation on the patient for the division of a large adhesion which prevented the total collapse of that lung.

The same observers report at the same time six cases of bronchiectasis treated by artificial pneumothorax.

The following are the results obtained by the treatment: The first case was cured. The second case was improved, the sputum being reduced in quantity. The third case was also improved. The fourth case, while improved, was still under treatment at the time of the report. The fifth patient died of pneumonia and the sixth of sepsis.

They likewise report five cases of hemothysis of unknown origin treated by the same method. In this list of cases, the first was cured. The second was likewise cured, but the third case continued afterwards at long intervals to have slight hemorrhages. The fourth and fifth were cured.

The conclusions of these gentlemen are worth quoting entire.

"It will be seen from the above cases that artificial pneumothorax may be of value in abscess of the lung, bronchiectasis and hemothysis of unknown origin and recurrent pleural effusion. In abscess of the lung, the success of artificial pneumothorax evidently depends upon the presence or absence of adhesions. Where these are absent, pneumothorax is sufficient of itself to effect a cure and render a more severe operation unnecessary. Considering the uncertainty of discovering the abscess cavity, it is certainly to be preferred to drainage. When the abscess is superficial, the presence of adhesions may lead, under pneu-

mothorax, to its intrapleural rupture, necessitating drainage of the pleura. If the adhesions are widespread, they may stand in the way of complete collapse and prevent success, necessitating thoracoplasty. But, even so, we advocate pneumothorax as a routine procedure on the grounds that it may be sufficient of itself, and where not, that the symptoms are relieved and the general condition of the patient is improved enabling him to better face the more severe.

"Success in bronchiectasis, as in abscesses of the lung, depends upon adhesions which in two cases led to disappointing results and in two cases rendered the application of artificial pneumothorax impossible. Another case shows that artificial pneumothorax may be completely successful when prolonged two years, and the failure in another of the cases we may attribute to insufficient length of treatment. This view is upheld by two other cases in which the treatment is still being continued with results already beneficial and hopeful. In the cases of recurrent hemoptysis and chronic effusion, success was striking."

The Contra Indications and the Dangers

You do not hear nearly so much talk about the dangers connected with the administration of artificial pneumothorax as formerly. Nine years ago even, one would hardly have attempted a pneumothorax operation without giving serious considerations to the following: shock, dyspnea, spasm of the glottis from pleural reflex, gas embolism, convulsions, edema of the lung, empyema, pulmonary abscess (if adhered), cerebral embolism, air embolism, and emphysema of the chest wall. But, as we have had increased experience with artificial pneumothorax, we have come

to disregard almost all these dangers; in fact, all danger is practically negligible if the treatment is given properly.

One should not, it is true, advise it in a case which is hopeless, as it will not do good, and the slight shock of the insertion of the needle may hurry the patient off.

I would not use it in diabetes mellitus, even with the best of indications in the thorax.

One real danger, formerly, was pleural shock. But, now, since we use a proper local anesthetic, this danger is practically negligible. Also, one should guard against the danger of putting too great a burden of pressure upon the untreated lung. Dry pleurisy is a condition which might interfere with the success of the operation, except where a comparatively small dose of air was injected. The same precaution will obviate danger from rupture of a lung.

Air embolism will also be eliminated from the field of dangers encountered if the air is never turned into the pleural cavity until the manometer reading shows that the needle is in the free pleural cavity.

Of all the discouraging prospects for the patient, upon whom it has been designed to perform an artificial pneumothorax, the most so is when we encounter dense and widespread adhesions; which simply indicates that we have not had the good fortune to see our patient early enough or that, after seeing him, we have needlessly procrastinated about instituting the artificial pneumothorax treatment.

Note.—The preceding article supplements one by Doctor Dungan, on page 103 of the February issue of this Journal.

MOTHERS' DAY

May Eleventh

Remember to bring or send flowers to your Mother and to the Mother of your children.

Surgical Seminar

Conducted by GUSTAVUS M. BLECH.

Personal

AS EDITOR of this department, I announce that I have moved my office to 108 North State Street, Chicago. Mail is frequently sent to the office of the Journal and this entails delay due to forwarding. As I am engaged in active practice, I visit the Journal office only when a conference with the managing editor is necessary, and that is an infrequent event. I make this announcement because a very large number of inquiries have come to me. While I endeavor, whenever necessary, to answer by mail, many letters are of a general character and it is hoped that this note will be accepted as a sincere expression of appreciation of the interest displayed by our readers.

Such interest is certain to result in an enlarged department. The scope of the Seminar may be widened to meet the needs of the occasional surgeon. As one able young writer has said to me: "The specialistic surgeon does not need the Seminar, but the practitioner who has the ambition to become a good diagnostician and operator, and who has only limited means to reach the goal, is the one most likely to look upon the Seminar as a valuable source of clinical information, and he is the one mostly benefited. But, mind, I say that he also desires to become a good operator and I am anxious to see you give us the benefit also of your long and varied experience as an operator." This wish may yet be gratified if the powers that be do not throw a monkey-wrench into the machinery.

Discussion of Problem No. 15

Recapitulation.—This problem, which was published in extenso in the March issue, is of peculiar interest in that the patient is a brother practitioner engaged in active practice in California, is personally known to the editor of the Seminar through military service in France, and especially because the good brother has suffered much, has been seen and treated by some of the most distinguished members of the medical profession of this country, and because so far the therapeutic

results have been highly unsatisfactory; so much so, that the patient is unable to carry on his work as a county health officer and practitioner of medicine.

I have given his name and address to two physicians who thought they had had a similar experience, and I am willing to give his name to any ethical practitioner who desires to give him advice directly.

The patient is a middle-aged man, rather tall of stature, who has been in fine health until 1905, when he was operated on for chronic adhesive appendicitis, the adhesion involving the posterior wall of the urinary bladder. Health remained good for nine years, when he began to suffer from lumbago, constipation and distress in the appendiceal region, especially after partaking of an abundance of food. In 1915, tonsillectomy was performed but without affecting the situation. In 1917, sudden pains in the lumbar region and over the appendiceal region, making walking a painful function. Operation for Lane's kink without benefit. In 1922, the patient was observed in the Mayo clinic with a finding of a fatigue neurasthenia, right sacroiliac subluxation and low-grade intestinal stasis. Operative therapy was ruled out and a sensible regimen ordered. In the same year, elsewhere, a laminectomy was performed on the presumption that there was a spinal tumor. None was found and the result of the operation was worse than nil.

Since then, the patient has seen a number of medical friends, undergone the most searching clinical examinations and "cures," but all without avail. His symptoms at present are, fatigue on exertion, mental depression, insomnia, sudden darting pains of a crushing character over the right sacroiliac synchondrosis, frequent micturition, spastic constipation and vague gastrointestinal distress.

Those who are more interested in this case should look up the original statement.

Discussion by Dr. Maximilian Kern,
Chicago (By Invitation)

Inasmuch as Dr. Kern is not a surgeon, but an internist in whose diagnostic ability I have

ample reason to entertain the utmost confidence, it is only proper to state that I asked Dr. Kern to let us have his opinion, which is as follows:—[Ed.]

The history of your friend, as published in the March issue as Surgical Problem No. 15, is of such a character that it requires a good deal of courage and almost some conceit on my part to comply with your request for my diagnosis and prognosis. I am particularly impressed with the fact that the patient in the case has had the service of many diagnosticians, after apparently thorough examinations, all of which seem to have failed. Forgetting for the time being that the subject of this problem is himself a physician, we utilize a few outstanding features as a working basis:

- 1.—The negative history up to 1905,
- 2.—The beginning of the troubles enumerated a reasonable time after the performance of an appendectomy,
- 3.—The sciatic pain,
- 4.—The apparent relationship between the adhesions (?) and the urinary bladder, and,
- 5.—The subsequent clinical examinations by competent observers, which in the main are negative.

Without venturing to analyze this case, I may say that it strongly suggests a case of my own, somewhat similar in character, concerning a mentally and physically fatigued business man, whom I had occasion to study in 1919. My conclusive findings then were: Periarthritis (mild), lumbar and sacral; colitis, chronic, catarrhal; sciatica; marked enlargement of the prostate, which latter condition appeared as the principal cause of all the urinary phenomena, which were almost identical with those described in the problem.

After removal of all foci of infection, a course of massage of the prostate combined with radium applications brought relief from all symptoms. I am glad to be able to state that my patient reported himself in good health about three months ago.

You realize that a theoretic analysis of the points mentioned above would lead us nowhere, except possibly to deny the relationship between the first operation and the subsequent phenomena stressed by the patient. On the other hand, the toxic element is too pronounced to be ignored. But, where is the source of this infection? Even conceding that the patient has had exhaustive routine investigations of the gastrointestinal tract, viscera and nervous system, too little is said about a study of his prostate gland and

genitourinary apparatus to justify us to accept a normal condition there. I suggest, therefore, that the patient undergo a cystoscopic examination, followed by a thorough investigation of the semen obtained by gentle milking of the prostate and seminal vesicles. An autogenous vaccine obtained from that source and judiciously administered may produce wonders.

Until this has been tried, anything further need not be discussed at this time, considering that we all are at a disadvantage because of the patient being *in absentia*.

General Geo. Acheson, Kingston, N. B.

On reading the rather depressing history of the California physician, presented in the March number, as Surgical Problem No. 15, I am reminded of the woman whose case is described in the fifth chapter of the Gospel according to St. Mark. She had been afflicted with a disease of twelve years' standing "and had suffered many things of many physicians, and had spent all that she had, and was nothing bettered, but rather grew worse." Her cure was effected by an act of faith, showing the power of autosuggestion over a definite physical phenomenon; or, in other words, the influence of the psyche over the corporeal nervous system, resulting in a physical change in certain organs and tissues of the body.

I judge, from the history given, that the only really definite disease from which our California brother is suffering, is chronic colitis, with its attendant neurasthenia and general debility; but that he is a somewhat serious case of subjective introspection.

I would suggest that this patient be encouraged to think as little as possible about his symptoms, to completely change his occupation, live as much as may be in the open air, avoiding hampering restrictions in diet, but using his professionally trained common sense as a guide in respect to both, quality and quantity of food. At first, the colon should be cleaned entirely by castor oil and enemata, care being taken to prevent the accumulation of fecal matter, and the digestive canal kept clean by the use of W-A Intestinal Antiseptics (sulphocarbolates of lime and sodium). Let him steer clear of doctors, particularly specialists, and lead the simple life! and, in time, he may hope for, if not a complete cure, at least an amelioration of his present condition, such as to make life once more worth living.

Dr. E. C. Junger, Soldier, Iowa

The report of this case arouses my sympathy, if for no other reason than the imagi-

nation on my part that, up to date, I had held the record for having the largest number of ailments which forced me to take up much time of many of my professional brethren, with the gratification of having a goodly number of diagnoses handed me, none of which bore the stamp of genuineness.

But now I am compelled to turn over the champion's belt to our friend, whose case constitutes the fifteenth surgical problem in the Seminar.

To me, there is no doubt that our good, but unfortunate brother suffers from a toxemia arising from an improperly functioning colon, in all probability a condition secondary to adhesions.

When a patient passes foul-smelling gas, there is something wrong somewhere in the intestine, be that due to putrefactive changes produced by improper or rather inadequate propulsion of intestinal contents, or to stasis of any one of the fifty-seven varieties. And, once a toxemia has fully developed, thousands of vague symptoms mislead us, making the sufferer look in any but the right direction for the principal cause.

Hesitatingly, as a reminder rather than a direct suggestion, I call attention to the fine results obtained by Lane through partial or complete colectomies. Maybe, that is the proper remedy for the colleague in sunny California.

**Discussion by Howard J. House, Ch.D.,
Hollywood, Calif.**

[Lest I be accused of narrow-mindedness in excluding from the council room a man who is not a member of the regular medical profession, and because I desire my friend in California to hear everybody who has something to offer, I publish the following letter from a chiropractor.—En.]

May I have the privilege of answering Surgical Problem No. 15? Although you may not believe as I do, I am interested in seeing this Doctor get well. I have had many such cases who have gotten well under my care.

This Doctor's trouble is caused from a slight subluxation (not a dislocation as many believe) of the right ilium, causing one limb to be about one inch longer than the other. (If he will have his limbs measured, he will find out I am right.) Since one limb is longer than the other, this will cause a curve in the spine. His right ilium, I judge, has been slipped (subluxated) for from 20 to 25 years, causing gradually his troubles from year to year, and also the pain and tenderness over the right sacroiliac synchondrosis.

The curve in the lower part of the spine (which he did not say he had, but I know that he has) caused his appendicitis, lumbago, constipation and colitis with pains in the appendiceal region and the sciatic pain.

I would not say that the x-rays through the kidney caused the difficulty in holding the urine, but the 5th lumbar vertebra, pressing on the nerve to the bladder. The 12th dorsal nerves are pressed upon, causing the gas in the bowels.

The sensation of being kicked in the back is caused, not by the bladder filling at night and pressing up against the cecum, but by making a certain movement in bed that causes a pressure on the nerves of that part of the back. And, to prove that I am right, I am anxious to get this Doctor and remove the pressures from the different nerves, thereby allowing nature to cure (which will take from one day to six months). I will do it gratis.

Editorial Comment

For once, I am not in the mood to comment on this problem, for the simple reason that I am in no position to make an authoritative pronouncement.

I believe, I have done my duty by writing Major F. a personal letter. What I said in that letter, is of no particular interest here. But, the habit of commenting on contributions seems to have taken possession of me and, so, I venture a few remarks.

Dr. Kern's suggestion deserves careful attention, in my opinion. If I were the patient, I would carry out his suggestion. He has nothing to lose and everything to gain.

Dr. Kern is a comparatively young man. Yet, I have seen a good deal of his work. He is a painstaking clinician of a high order who is endeavoring to actually cure particularly that annoying class of disease (internal) which are on the borderline between the difficult and incurable ones. I have seen some of his results. They are splendid. His work with organotherapeutic remedies is one based on strictly scientific principles, and he often accomplishes cures when the classic methods have failed. Dr. Kern will soon be heard from as an original investigator.

My good friend, General Acheson, gives a splendid preachment, which, too, should be taken to heart. This is no empty phrase. I, myself, have been ill—beginning two years ago—very much so, and certain phenomena have frightened me, not because of the fear of death, but because of the fear of invalidism. I am not well yet, and probably never shall be. I have been "diagnosed" from tobacco-

poisoning, autointoxication, and cholecystitis to duodenal ulcer. I have had some of the best men in the country "take a look" at me. Yes, I refuse to throw up the sponge, and anyone looking at me would pronounce me in fine health and—a neurasthenic. For fifty-one years, I have had no "nerves"—Suddenly hyperesthesias, pyrosis, vertigo, muscular stiffness and contracture-like sensations appear irregularly in the midst of health, last an hour, two hours, several hours, and then disappear. This is not neurasthenia, as commonly understood, but a toxic condition due to some organic cause. I do take alkalines and bile salts, etc., and refuse to go to pieces. I carry out much that General Acheson suggests, except the giving up of my profession. I shall do that when I close my eyes forever—and not before. Possibly, Major F. is in the same boat with me. He has a family to support, and so have I. Outside of a splendid library and a rather expensive surgical outfit, and insurance, I have my ten fingers, and nothing more. I do advise Major F. to heed General Acheson's: "Forget it, old top, and brace up!"

Of course, it is easy to preach. But, I am

not preaching. I am speaking from very sad personal experience, as our good friend Achard can testify.

All this, though, is secondary to something organic, which may or may not be overcome without recourse to surgery. Only actual observation, freed from specialistic prejudice, can decide.

After all, Dr. Junger has talked a lot of good sense, though I would hesitate to resort to his colectomy, except as an *ultimum refugium*.

Surgical Exercise No. 1

On account of limitations of space (*vide supra*, re "monkey-wrench being thrown into the machinery"), let us have a brief exercise:

You are called to see an old man, whose urine has not passed all day. There is no anuria, but a plainly overdistended bladder. Soft-rubber and metallic catheter do not enter the bladder, there being a real obstruction (non-spasmodic) at the sphincter vesicæ (stricture? There is an old history of gonococcal infection). The distress is great.

What will you do to bring relief without resorting to major surgery?

RADIO MEDICAL ADVICE TO SHIPS AT SEA

We have repeatedly read of the use that has been made of the wireless in giving medical advice to ships at sea to which no physician was attached and where one of the crew had become desperately ill. Likewise, ships carrying their own physician have made use of the service, for consultation.

Formerly, the plight of a sick sailor at sea often was desperate. Today, the captain can send out a wireless message to the nearest U. S. Marine Hospital describing the sick man's condition and asking for advice. A reply is shortly received, telling, in simple language, what to do and how to do it.

Because of its duty to take care of sick and injured seamen, the Public Health Service has constantly worked to provide some intelligent first aid aboard ship, to relieve suffering and prevent complications which so frequently follow untreated injuries. Many seamen have died, others have suffered needlessly and still others have been disabled for life, because of the lack of facilities on board ship and because there was no one on board to aid the sick who had any training in the rudimentary principles of first aid.

The following three very important fea-

tures are considered indispensable to the proper treatment of sick persons on ships at sea without physicians:

Medical Advice by Radio.

Knowledge of First Aid by Ship's Officers.

A Standard Medicine Chest.

The first item has been described and is in effect; The Public Health Service now conducts lectures and examinations in the principles of first aid for the benefit of all applicants for original license as master, mate, pilot or engineer, who are required to acquire this knowledge before a license is granted. So, eventually, all of the above-mentioned officers of a ship will be able to give intelligent first-aid treatment.

A Standard Medicine Chest has been designed by the Public Health Service, and a model was recently exhibited at the Marine Congress and Exposition, held at the Grand Central Palace, New York City, the week of November 5, 1923. This model was the center of great interest and was received with much enthusiasm by representatives of Steamship Lines and the officers of vessels generally. The Public Health Service will lend its full support to the movement designed to make obligatory the use of this chest, the presence of which on board ship means so much to the American sailor.

Good Medicine

Let us learn as we go, but not forget what we know

Conducted by GEORGE H. CANDLER

Seasonal Diseases

No. 1—Love

Station *GHC Chicago, Illinois, Broadcasting*

BY special request, we shall commence our program this month (we just have to commence somewhere) with a rendition of that exquisite anthem "Maid of Athens (Ga.)," composed by Byron as he swam the Hellespont just to "show up" Leander. The anthem will be rendered by Tremolo Tim, the Tennessee Tenor and, after he has concluded, we shall personally talk about Love from a scientific standpoint. Keep on your earmuffs—this is going to be a great evening. Mr. Tremolo Tim will be accompanied by Banjo, Pipe-organ, Xylophone and Snare-drum.

"Maid of Athens (Ga.) ere we part,
Guv, oh guv ma-a back ma-a h-e-a-r-t;
Or, since that has left ma-a breast,
Take coat and vest—but leave the r-e-s-t!"

Byron, it is evident, was a practical poet. If, as tradition has it (or *has it?*), he was swimming in Grecian (not greasy, Mr. Composer) water when he composed the words and music of this once popular song, he knew that, if his Helen were to walk off with more than his heart, coat and vest, he would be in an embarrassing position when he came out. He was ready to surrender the shirt from his back, but he still felt that Love did not demand the surrender of his trusty nether garments. You know what I mean—nothing to do with B.V.D. but the *visibile* subequatorial covering.

That is **MAN** all over: He loves and gives up his heart but, always, he has a *reservation*. Woman differs—she has a dozen. Sometimes more. Man will spend all his money upon his inamorata and then borrow a dime from some perfect stranger to get home on. The lady, all the time, will have at least ten times that amount tucked safely away somewhere—she's taking no chances. She's human—and a female. After—if—they're wed, he may be

eternally broke or badly bent but, nine times out of ten, she will have a "sinking fund" somewhere which will insure a new Easter outfit. Woman *thinks*—even in Love. Man just follows an instinct.

He kisses the hand that feeds him—but, if the cooking is very rotten, he's apt to take a bite somewhere else. A woman quite often "bites the head off" the man who brings the bacon home and refuses to kiss him unless he has had a clean shave. That is, if he wants her to—if he isn't particularly anxious, she'll demand to be kissed every thirty-five minutes. She believes in woman's rights and, what has she a man in captivity for if he isn't kissable on demand? *What* indeed! All of which brings us back to the prime conundrum. *What* is Love and *Why*? Also, as a postulate, *How*? Adam wondered about that. Eve never did; she had studied his (Adam's) apple and knew that things would be just as they were. That's woman again. She "just knows"—and one may accept it as a fact that, what she "just knows," is a whole lot more than the average man ever guesses.

Some male individuals, when they attain the age of twenty, announce that they "understand" women. Ten years later, they shake their heads sadly and often may be found kicking (or trying to kick) themselves in the back yard. When they reach fifty, they take off their hats when they see a young (and pretty) woman coming and acknowledge that they "don't know how they do it, but they *do*." They *DO*.

There is the whole milk of the cocoanut—they *DO*. Women do, I mean; Men get done. Completely, utterly, and to "the Queen's taste" (this probably refers to the Queen of Sheba who did up poor old Solomon). If he, with his 57 varieties (or was it 557?) didn't know that the Q. O. S. would sting him good and plenty, how can we blame the average male for coming back to get stung, say, the sixth

or seventh time? Careful observation leads one to venture the opinion that man was born to the stinging as the sparks fly upward. He fools with the sparks as they fly and later regards the blisters upon his hands and warbles "Why, oh why did I kiss that girl? Why, oh why, oh why?"

Why? Oh, just because she looked that way at him. Woman doesn't often have to say with a stern voice and determined mien "Kiss me, George!" or "Forsake all and follow me." All she has to do is, glance just a certain way and a man will leave his car standing on a crossing, blocking traffic, both foot and wheel, and follow her all the way to Evanston—sometimes farther. Here we have the solution of the problem, the answer to the conundrum! Man was created to run after woman. He is so constructed that he makes a little better time than she does, so he usually catches her (if, on looking back, she decides that she wants to be caught) and then, later on (more or less), he "catches it" if he even knows a glance (from alien headlights) when he sees it.

When a man is really "in love," he's a lobster. When a woman is really "in love," she's a she-serpent. They're both queer fish, deeply immersed at this period, but sooner or later the lobster will be absorbed by the S. S.—that is what lobsters are for.

When a man only thinks he's "in love," he's just a weak-fish, and some giddy little sardine will smother him with olive oil and then can him. Verily, under any circumstances, the poor fish has about as much chance of escape as the angle worm on a hook. Therefore, if it is scientifically proven that it's no use trying to escape, why try? Why not be caught? It isn't so bad when one gets used to it. This identical argument has been eloquently advanced in re measles and mumps. Everyone is supposed to have all these disorders. So, why not fall in Love and get it over with? You must fall into *something*, somewhere, some time! The difference lies in the fact that measles protects against a second attack: Love doesn't. Not the "catch it quick variety." I've known people to have the measles twice, but I've seen just-maturing adults who had already been "in love" ninety-six and eight-tenths times. They get the habit. Sometimes, even, they are attacked twice in one day. That is worse than the seven-year itch.

Then, on the other hand, you will meet the heavy immune. He loved, once [*slow music here, Professor!*] a dear little flaxen-haired

damsel who sat just in front of him at school and shared his apple on the way home. He carried her books, he strapped her skates and, one delirious June evening, he kissed her on the back gate—that is to say, she was swinging on the gate leading into the rear of the parental premises when he committed the heroic deed. Whereupon she ran right into the house saying, "I'll tell my Ma." But, somehow, she forgot to do it. She didn't forget, however (her ambition now being aroused) to shake him the very next day and walk right past him later with that fat Tom Tinker. Right there and then, the immune foreswore forevermore the female sex and kept on swearing (in a less and less vigorous manner), till he began to get bald on the extreme apex. Then, my fellow countrymen, he FELL. And, what a fall was there! An antiquated blonde got him and there was a church wedding with ushers and bridesmaids and assistant pastors and announcements in all the morning papers and a banquet with colored orchestra (lights also colored in lighter shades) and joy reigning supreme generally. And, by the irony of fate, the little flaxen-haired girl who left him for Tom (as she had left Tom for Harry, and Harry for Jeremiah, *et al*) was the be-a-utiful and BLUSHING bride. [Jazz Orchestra will now play the "Wedding March" followed by "Doodle-de-do."] The moral might be drawn that it isn't well to be immune too long—especially if the other party isn't. To be strictly up to date: One immune and one flapper, and someone will come a flopper.

Or, if she's flip and flaps, leave her to the other chaps. And don't carry a return ticket to *that* station. Janesville may be your "home town," but Ladysburg has a sign out, "Welcome Tourists." If you *must* be caught, don't get canned too—or rather don't be canned and then caught again. *That's* almost foolish. Of course, you'll be foolish anyhow, but, why assume the superlative? True happiness lies in mediocrity.

I would leave this discussion of prophylactic procedure for a moment and ask, ere the flowers bloom, the grass become green, and the shadows charitably fall at even-tide, if you, my more intelligent hearers (I think that "more" should be most; but let it go) ever lingered a moment and watched *hoi polloi* make public demonstration of their (temporarily) undying affection? In the parks, on street cars, in the forest preserve, on the seats of staid family and distinctly disreputable

flivvers, in all sorts of unexpected places, haven't you seen Mike O'Flynn hanging on to Kathleen Arleen Moriarity with a grip which naught but Death or the contents of an ice-cream cone down his back could sever? Haven't you observed that, for some inexplicable reason, Ole Olson, when in love, is always sleepy and his best girl sits in a trance (and on the grass) holding his head in her lap with one hand while she eats peanuts with the other. HAVE you, I ask, observed these things? Next season, alas, Ole's cranium may repose on the femurs of Katrina Kolinsky while his late best girl shares a hot dog on the sands with Michael O'Flynn.

And again, these things may not happen; but, within one fateful year, both Ole and Mike may be handing over the envelope regularly each Monday evening (or Saturday night, as the case may be). And, will those wistful wives sit for hours and hold hands or heads? They will *not*. Their little pink ["little pink"?—En.] digits have the wheel now and they *drive*. Sometimes. May the fates grant 'tis so in the majority of cases. For, when a woman drives, she takes the middle of the road and (somehow) usually gets to her destination. Moreover, she avoids the worst bumps, though, it must be admitted, she has a weakness for climbing telephone poles. Anyhow, she won't burn as much gas as the man will. Neither—till she reaches her goal—will she blow her horn as often or loudly. She may even encourage him to do the blowing while she just drives. After all, man would be a poor creature without woman to manage him.

And, now, let us consider another aspect of the disease. Men, it is said (or sung), are deceivers ever. Even old John Watts, who wrote more doleful hymns than any other mortal man, said:

"As a tree falls, so it must die

As a man lives, so he must lie."

—or something like that. I may have the lines slightly transposed but there's a man and a tree and a lie in it anyhow. And a man

has, we are assured, lied to a woman under some trysting tree ever since he could talk and she listen. But, supposing he told the truth, the whole truth and nothing but the truth—would she, do you think, appreciate it? If, like Ole, the far-famed Swede, he softly whispered, "You've got bow-legs and a double chin but you're a darned nice girl for the shape you're in," would she flutter and say, "O-o-h Ole," right into his necktie? Would she not rather sweep majestically away into the surrounding shadows and leave him forever? Cannot you see a bow-legged Swedish demoiselle doing that? I can. Then, if a man said, when she asked him "Did you ever, e-v-e-r kiss anyone else?" "Only my grandmother and our kitty," would there be any thrill of conquest if she knew that was true? Wouldn't she rather think that he was just fibbing a little bit and that every other female of kissable age in the county had been willing victims to his wiles, but that, Now, she had him captive, while *they* were "has-beens"? If she was a true woman, she would. Women demand that men shall prevaricate, both for them and to them, before marriage. After the ceremony, he may depart from the truth for them but lie *to* them. My gracious, No! And they don't—not if they are fully domesticated.

Now, I trust, I have fully convinced you that we know why Love is, *what* it is and *how* it is. It is because it is what it is, and that is the "how" of it. It may be termed a virulent contagious disease, seasonal (more or less) and marked by high temperature, temporary hallucinations and anorexia. The latter symptom is not always in evidence. [More or less of a racial peculiarity? Remember the peanut eating damsel.—En.] The patients usually recover under appropriate treatment. Relapses, however, occur in about 99¾ percent of all cases.

Announcement: The next feature will be "Seasonal Diseases; No. 2—Marriage." The orchestra will now play the latest popular hit, "Alimony Blues."

"*FRANCE* needs nothing so much to promote her regeneration as good mothers", said the first Napoleon. We hold that the same is true, today, for the whole civilized world.

Let's Talk it Over

Dr. Bryce's Talks

The Doctor With a Hobby.

IT was before the days of the automobile, but we had high-steppers, first-class Virginia thoroughbreds, and with light buggies we generally could outdistance for reasonable trips the old accommodation trains stopping at every hogpath, certainly for the first eighteen or twenty miles. In those days, in the absence of trolley cars and flivvers, when one had driven fifteen or twenty miles into the country, he was pretty close to nature, spelled with a big N.

On a crisp November morning, before sunrise, I was returning on foot from a night visit and, as I neared a corner, I saw two pointer dogs dash around into the street and pause looking back, evidently to see which way their master would take. I was born in the country and spent my young-manhood there, but I had been plodding almost slavishly at the work of a general practitioner without a glimpse of the green fields of spring or the browning leaves of autumn for more than eight years. The sight of those two dogs trembling with expectancy and excitement brought the glories of a bird hunt over familiar fields back to me with overwhelming force. The rapid fall of hoofs and the clatter of the wheels of a light Brewster announced the arrival of the huntsman as he rounded the corner and drew up at my side with a cheerful "Good morning, Doctor."

It is wonderful in this life how trivial circumstances make momentous changes in our entire course of action and change our viewpoints of others' character and disposition. This man was a doctor with whom I only had a speaking acquaintance and towards whom I had never been in any way cordial—in fact I had been rather cool towards him. And, yet, I never could say just why I did not like him. The truth was, I never really knew him until that day developed him. He had his gun and was arrayed in his hunting toggery. Throwing his warm robe back, he simply said, as all true hunters can understand: "COME ON."

"I haven't had breakfast, I have a lot of patients to see, and I am without rough clothes or gun," I said.

"Make out a list of your patients," he said.

The fever had me, and I jumped in his buggy and scribbled off a list of my most urgent cases while he drove me back home. He asked me to tell my wife that he needed me to help him in a matter out of town and to get her to send my list to a friend to see for me, "but, don't hunt up any clothes or gun, as it will take you half a day to find your stuff and will give you away. I will fix everything all right."

"All right," I said, "I'm in your hands."

As we reached the outskirts of town, we called the dogs in, tucked them down in the foot of the buggy and gave "Big Bill" the handsome bay, the bit. The powerful animal sprang ahead and had hardly warmed up when we had reached the Chickahominy bridge, nine miles of our eighteen drive, and the sun hardly up. We let the horse blow fifteen minutes, take a drink of water, and allowed the dogs to stretch their legs, after which we started at a more moderate trot on the homestretch. After another hour, we came to the top of a very high hill and, at its foot, meandering in and out, was a glistening little creek making its way and losing itself in the broad meadow off to the right, and beyond this on rising ground and surrounded by undulating fields of brown stubble, towered a grand old mansion with its broad verandahs, dormer windows, and curling smoke ascending from its tall chimneys in welcome greeting to the hungry travelers. This was the home of a rich old bachelor uncle and the end of our drive. He was a well preserved, fine looking man, whom I would have taken to be about sixty, living there with a widowed niece and her little son, both of whom, I soon saw, he idolized and petted "almost to death." It was fortunate for the dependent relative and far more fortunate for this dear old uncle,

who was a big-hearted man and a game old sport. He was looking for us and met us in the lawn driveway with a hearty "Hello, Tom, get right out, you and your friend," and Tom said, "Hello Unc. John, dern glad to see you. This is my friend, Dr. Bryce, Unc. John. Is breakfast ready, Unc. John?"

As this was a curious introduction, all I could say was "Hello Unc. John" too, and the genial old fellow laughed and said "Come on in, boys, and have breakfast. I know you are hungry and cold after this early drive." Thus commenced for me one of the most delightful days I ever spent and friendships that lasted as long as those splendid people lived.

Uncle John led us directly into his office, or business room, a great, big, comfortable room with a large fireplace and old-fashioned andirons holding a pile of brightly burning hickory logs. And, if there is anything that beats a hickory-log fire for warmth and cheerfulness, I have never seen it. It was a typical bachelor's den, but it showed a woman's care, nevertheless, for there was a certain orderliness about the remarkable collection of odds and ends that adorned his stronghold. On the long mantlepiece, was a tobacco box filled with a famous brand of smoking tobacco, and a half dozen long reed-stem Powhatan pipes were scattered over the mantle. These Powhatan pipes were made from a special clay found more extensively in Powhatan county, Va., and were known and used all over Virginia and North Carolina for their supposed extra porosity, extracting the nicotine in a measure from the smoke.

A literary friend who has just stepped in says that Powhatan clay and Powhatan county have nothing to do with the name of these celebrated pipes, but that they were named after a mighty king by that name who had his camp in that neighborhood and smoked what was then called the pipe of peace. Maybe so.

Leaning up in one corner of this ample room, were a lot of fishing poles with lines and corks and hooks of various sizes, an old single-barrel flint gun, a more modern double-barrel muzzle loader and a very pretty double light-weight breech loader.

I took to the dear old soul at once, for he just threw an arm around "Tom" and me and said: "Boys, I am dom glad to see both of you," accentuating his words with a good hearty squeeze. He opened a cabinet and displayed the usual signal of hospitality, as recognized at that time in old Virginia. "I never ask a young doctor to drink whiskey or brandy.

I have seen too many medical men wrecked, but, today, remember, you are not doctors. Let's all have a drink and go in to breakfast." It was considered neither sinful, disgraceful nor unlawful for a gentleman in those days to observe the customs of his forefathers in welcoming his guests with a mint julep, a brandy cock-tail or an apple toddy.

Across the broad hallway and in the spacious dining room, we found Mrs. H, whom "Unc. John" introduced as "my niece, Mary, ah I mean Mrs. H." he corrected, and her little son, John, evidently named after our genial host, and the pet of all hands. Crackling log fires burned in two big fireplaces and a breakfast fit for a king awaited us. Sally Lunn, short biscuits, egg bread, and the hot water toast, for which the Virginia housewife was justly famous reminded me of my own home when a boy. We had barbecued chicken, breakfast bacon, sliced ham and poached eggs, and hot coffee with "sure enough" cream in it and plenty at that. I was hungry as thunder and, under the stimulus of "Unc. John's" apple toddy, I ate until I was actually ashamed of myself.

My hostess was a charming woman in the prime of life, handsome but serious and highly cultured and apparently living to make her home a paradise for her uncle and little son. I learned from the doctor that she had been a widow since Chancellorsville, and from the life-size portrait of an officer in Confederate gray, hanging in the parlor, a cavalry sword, sash and gauntlets upon a table underneath, I knew that her life work was dedicated to the task of raising that boy in the footsteps of his father, for, when little John pointed proudly to the sword, he said, "That was my papa's sword and mother says when I grow big and good like him I may have it." Dear little fellow, little did I think then that his own blood would stain the hilt of that honorable sword on the battle field in a foreign land and be brought back to his loved ones as a mute reminder that he had "followed in the footsteps of his father."

Good gracious, I did not start out to write a memorial chapter, but to prescribe a cure for overworked, nervous, grouchy doctors, and here is a starter: Fortunately, "Unc. John's" clothing fitted me quite comfortably and I soon changed my street clothes for a pair of easy "stitchdowns" and a comfortable corduroy hunting suit, commandeered his nice little 16 ga. double-barrel smooth bore 26 inch

breech loader, filled my pockets with smokeless shells of $2\frac{1}{4}$ drams of Dupont's smokeless powder and 1 oz. No. 8 shot and joined the waiting pair on the verandah. I noticed that my host was fitted out with a double-barrel muzzle loader, a black powder flask and a shot belt.

An old Irish setter was quietly resting at his feet. All three dogs got up and came up to me as soon as I stepped on the porch with the gun in my hand giving me a welcome that every huntsman understands. They nosed my gun, sniffed my pant legs and muzzled my hands. In dog language, they told me just what their master had said earlier in the morning: "Come on." I made friends at once with the old setter, for I judged that she was slow and staunch and that, as I was "soft," not having been in the field for over eight years, her gait would suit me better than that of my friend's seasoned pointers.

Mrs. H. warned us that dinner would be on the table at one o'clock, and admonished us to time our return accordingly, and she laughingly added "If you break down, doctor, send old Sally (the setter) back and I'll send my saddle horse out for you." This was no joke, for the faithful old setter would take a note pinned to her collar back for anything wanted or to carry a message. The program was to be strictly a bird hunt with the privilege of shooting at any hares that we "jumped," but none were to be shot in the bed. So the hounds, greatly to their disappointment, were shut up in the barn and left behind. Over five hundred acres were spread out before us as far as we could look, presenting upland and meadow and undulating fields furnishing cover and feeding grounds for the birds. The day was ideal, cool, crisp and the air so clear that it was bluish. Unc. John was in command and called two negro boys to follow us and tote the old hares as we killed them. If any of our readers are not familiar with the word "tote," in old Virginia, it is the classic for carry.

"Tom, you work that field to the left and the doctor and I and old Sally will keep up this ditch bank to the right, all keeping close enough for a shot when the dogs stand, that is, if your wild dogs will hold a point," said our leader.

Old Sally was a sensitive, quiet and attentive dog and had made up her mind to hunt with me and for me that day; for, as she picked up the scent and began to work cautiously, she looked back at me over her

shoulder showing the white of her eye and saying as plainly as if spoken in words "keep close, they are right ahead." Crouching and advancing step by step and giving me one more look she simply grew rigid in her tracks so quietly that I could hardly say when she stopped. Doctor, if you have ever been afield with thoroughbreds, you can appreciate what it is to have a friend like old Sally. She was about midway between Unc. John and myself and on my side of the ditch bank. The old man had halted also, and I sang out to the doctor away to my left to come on so we all could take them on the rise, but he pointed to his two dogs who were trailing beautifully and close upon another covey and told us to go ahead: "You and Unc. John can attend to them." "All right, doctor, walk 'em up and get what you can when they 'rise. They are coming on my side and will make for that skirt of pines and I will have all the shots I want," said Unc. John.

I had hardly taken a half dozen steps before a tremendously large covey of partridges came roaring out of a clump of bamboo and sassafras scrub with such impetuosity I almost forgot to shoot. However I did as most over-eager huntsmen do and let both barrels off as quick as I could right in the crowd and never touched a feather, as is usually the case. They quartered about thirty yards in front of Unc. John and made for the strip of pines; he got one with each barrel.

The old man was very considerate and said, "You haven't broken in yet, you shot too quickly and into the covey. Be more deliberate next time and always single out the bird you shoot at."

"How about your two birds out there?" I asked.

"Send Sally after them, she would be insulted if we got them."

"Dead bird, fetch, Sally," I told her, and she bolted out and brought first one and then the other and gave them both to me!

"Unc. John, don't that beat anything you ever saw?" I asked him.

"Oh no, she is a sensible and sympathetic dog, she is sorry for you."

Just as we were about to follow and shoot singles in the open pines, we heard the doctor calling us to come on as his dogs were standing a covey. As we neared the dogs I saw they were not staunch and they began to take a step nearer the birds. It was painful to see the doctor's efforts to stop those dogs, more painful to note his mortification, as Uncle

John fairly roared with laughter, as he yelled at them: "Take care, TAKE CARE," Take care, Dan, you damn scoundrel, run up, you-all, they are going to break." By this time, both dogs were beyond control and old Sally could not stand it any longer. She made a bolt at the nearest one and grabbed him in the neck trying her best to stop him, showing the good blood that was in her, while the other dog bolted into the covey. Unc. John got two and I got one; the doctor was so mad with his *thoroughbreds* that he forgot to shoot.

"Tom," said his uncle, "I want the doctor here to have some sport today, and those dogs will ruin any hunt, so if you will take them off to the left over those fields and try to train them, we will follow this branch and meet you at dinner." We took Sally and hunted leisurely for two hours, when we found ourselves a mile and a half from the mansion house and only a quarter of an hour to get back on time as scheduled for dinner. We had killed as many hares as the boys cared to carry and we had seventeen partridges. Unc. John gave me credit for killing seven.

I was broken down and had gotten up a fierce appetite. I told my good old friend just how I felt and told him I would have to take a good rest before I could attempt the return trip. We were within calling distance of a negro cabin of one of his tenants and he "hollered" up to a colored man to put a saddle on Kitty and send her down there. In a few minutes, the man led a very sleek little mule to us with a McClellan saddle on her. "She air perfec' gentle, boss," said the darkey. "If you can mount that mule without help, get up, take that path and give her the rein and she will have you at dinner in time," said Unc. John.

I didn't need a second invitation, and got on, not up, for my feet were not six inches from the ground as she ducked her head and struck a lively canter up the path homeward. I heard a whoop as I started and looking back I saw my old friend holding his sides convulsed with laughter at the sight I presented on that diminutive animal.

Kitty never broke her gallop until she stopped under the horse-rack at the great-house, and little John met me with a message from his mother that dinner was ready and we would not wait for the others. He took me in his uncle's lounging room and poured out a bowl of cool and refreshing well-water inviting me to wash my face and hands, and, child-like, said, "This is mighty sweet soap.

Unc. John says it is dudes' soap, but I like it."

I was very thirsty and started to drink a gourd of the cool water when he said as a warning: "You better not drink too much of that water, there is a glass full of something good for you at the table." And, sure enough, as I took my seat, I observed in front of my plate a goblet of rich amber colored liquid with lumps of ice and towering sprigs of fragrant mint. I was in a quandary; I wanted that julep, I did not wish my kind hostess to think me unappreciative of her courtesy, and I did not wish to set her little son an example that might harm him.

"What is in this glass, Johnnie?" I asked.

"Why, that's a mint julep, for you."

"Oh, I'm so sorry I cannot drink it."

"Why not, doctor?" he asked.

"Because, when I was a little boy like you, I promised my mother I would not drink whisky, and now she is dead and I am going to keep my promise."

"That is what I have promised mama," he said.

"Well, John, let's keep our promises."

"All right, doctor," he said.

Mrs. H. arose and took up the glass and saying, "deliver us from temptation," carried it into the pantry and returned with a pitcher of sparkling cider, which was better for me and Johnnie.

After, what seemed to me, the best dinner I ever ate, I excused myself and went into Uncle John's room to put on my own clothes, as I knew the hunt was over for me that day. Thinking that I would doze for a few minutes, I curled up on the big lounge and pulled a carriage robe over me. When I awoke, the big face of the grandfather's clock told me that I had slept for three hours, and I heard sounds of music coming from the parlor. Mrs. H. was at the piano, Unc. John had his Cremona stuck under his chin and the doctor was "clapping." It reminded me of the days of my childhood and of Auld Lang Syne as they played those dear old airs—Dixie, Run Nigger Run, Old Dan Tucker, My Old Kentucky Home and kindred and touching songs of long ago.

I never spent a more delightful day with more charming people, and, when I bade them good-bye, Mrs. H. said to me with a twinkle in her eye: "Doctor, I thank you so much for the sacrifice you made today, but Uncle John says he will square it up."

As I was settling myself down in the buggy, the old veteran handed me a package and said,

"You are mighty good before ladies, but that is over ten years old! Come again soon."

The doctor clucked to Big Bill and we were off and, just as the police were lighting the street lamps, my friend unloaded me with a big bag of game and my package that dear Uncle John gave me. We parted with a hand clasp, that evening, that meant a lifelong friendship.

This may be called a huntsman's story by some, but I consider it good medicine for sick, sour, grouchy doctors. When you begin to feel doubtful and suspicious of your competitor, don't grow sour or sneer at his success, but find out his hobby and know him better. Forget your work and take a day off with him. You will love him like a brother if you look for the sunny side of him.

There are men in this world who are inclined to speak disrespectfully of huntsmen as a class. They classify them as "loafers" or "trespassers" and seem to think that the only mission of man is, to grind on forever without a moment's recreation until the last call catches him with his hand on the other fellow's dollar! You will hear them say, "I don't see how Jones can keep a dog, a pretty gun, and take whole days off from his business and keep his bills paid, when it is all I can do to keep buckle and tongue together, though I never miss a day from my business."

Well, now, the secret is just this: Jones is the better man of the two. He is more successful in business because he lightens and brightens his heart by going out and enjoying a whole glorious day over the brown and fragrant fields, through the bright tinted woods and along the purling brook. He has rustled around and inhaled the fragrance of the pungent pine and "life everlastin'."

He has been reminded of his days back at the farm, has retrod his steps from manhood back to boyhood and sat down by the "old fishin' hole" where he hooked his first minnows; he has come back by the old pasture path along by the foot of the old garden and paused under the willow tree drooping over a lone mound—he has lingered long enough to lean on the crumbling rail and go away back to the memory of the dear one resting under that mound. Perhaps he utters reverently the word, "mother" and wipes away a tear.

Jones may not have as many questionable dollars as old skinfint. But, when the boatman calls for Jones to take his last trip, there'll be no trouble about the toll.

516 N. 10th St., Richmond, Va.

TWO GOOD COLORADO LOCATIONS

Our good friend, Dr. Russell J. Smith, Westcliffe, Colorado, whose attractive description of medical practice in the west appeared in *CLINICAL MEDICINE* for April (p. 271) informs us that, owing to the indisposition of his wife, due to the high altitude, he must hunt up another location and, consequently, will leave his desirable practice open to the purchaser of his household goods and some of his furniture and supplies.

Further, Doctor Smith has knowledge of a very fine location for a good man who will hustle and who can do surgery.

Full particulars regarding both openings can be obtained by addressing Doctor Smith personally, at the address given in this notice.

We trust that Doctor Smith can dispose favorably of his possessions and also that he will find soon a favorable location in which his wife's health will be restored fully.

OF INTEREST TO PHYSIO-THERAPISTS

Established physiotherapy office practice in Middle Western city of 12,000. Lease-right on office of 2,400 square feet floor space at low rental, all partitions and special wiring for treatment booths. Several pieces of apparatus. Office practice and no competition. Address The Managing Editor, *CLINICAL MEDICINE*, 4753 Ravenswood Ave., Chicago.

THE TREATMENT OF TUBERCULOSIS

For nearly twenty years, seven of which were in hospitals or clinics, I have had a great deal to do with tuberculosis in its various stages and forms, and have often wondered why authors and others seldom, if ever, consider its associated infections. In his fine article in the February number of *CLINICAL MEDICINE*, Dr. Metcalf mentions them but says nothing about how to combat them, nor does he point out the value to the patient of such a procedure. In thousands of sputum examinations, where a few tubercle bacilli are found, there are hundreds of other germs, and in such cases the results of any treatment are better if those hundreds are fought vigorously.

Take a recent case as representative of many seen during the past years. Mrs. W. J. L. age 34, married, three children, 5, 9, and 16 years of age; never had any serious illness

except pneumonia, about ten years ago. Seven years ago, she began to suffer attacks of asthma. In the periods between attacks, she would often have a light cough, especially after taking a deep breath, though it was often no more than a sort of a grunt. She took treatment from several physicians, but the asthma gradually grew worse until existence was a distress. She had very frequent paroxysms in which she thought she would die, the doctor would be sent for, and he would give her a "hypo" to relieve her. Many of the doctors would tell her that there was no successful treatment for asthma and all that could be done was to give her the aforesaid relief. Seven years of this found her despondent and discouraged.

I was called to see her in September, 1923, when in one of her severe attacks, and found a very much distressed patient. I gave her no opiate but ordered a 5-grs. capsule, every hour for 8 doses, each having $2\frac{1}{2}$ grs. each of quinine salicylate and hydrobromide. An active saline physic was given at once and the chest was covered thick with antiphlogistine. She got quicker relief than the "hypo" had ever given her. I got a good specimen of sputum and, in four or five smears, found probably half a dozen of tubercle bacilli, but thousands of diplococci, streptococci, staphylococci, *B. influenzae*, *M. catarrhalis*, a few *B. tetrad.* and pseudodiphtheriae.

The patient was emaciated, skin dry and harsh, appetite poor; constipated, menses irregular, leucorrhea profuse. Her teeth were x-rayed and many pus pockets found, with much pyorrhea. She refused to have all of her teeth extracted; so, was given a few treatments for the mouth condition, by her dentist.

I did not tell her of the positive tuberculosis but informed her of its possibility and of the other infections. I gave her treatment for the constipation, adding protonuclein (R & C) as a tonic, and administered full doses of "Respiratory Vaccine (P. D. & Co.)" at intervals of four to seven days.

She has had fourteen doses and has not had a severe attack of asthma since October 1, 1923. Her skin is clear and rosy, appetite good, she has gained fifteen pounds and her mouth condition is about well. She had not been able to exert herself for years but now does her own cooking and house work and can run upstairs where she used to stop on the landing and rest. She has no cough and, judging from experience I have had with others, I feel sure that her system will com-

pletely combat the tuberculosis when the other aggravations are out of the way.

We are told that tuberculosis is a very active disease, but I believe that it is comparatively slow from the fact that a very high percentage of people have had it at some time in their life and yet show no evidence except at autopsy.

In all of these cases, all hygienic measures should be urgently insisted upon—diet, bathing, out-door air as much as possible—but always see that the patient is comfortable. Out-door living when the patient is cold and disagreeable does much harm.

Some may question the emergency treatment which this patient received, but the thoracic symptoms are almost identical with those of bronchopneumonia and the treatment is almost specific in that disease. For years, I have considered that quinine prescription as a real result getter in pneumonia. The physic is always imperative and the hygroscopic action of the antiphlogistine and its kindred preparations gives very quick respiratory relief; therefore, it is good practice.

AMOS T. FISHER.

Lakewood, O.

TELEPATHY

Glancing through the January issue of CLINICAL MEDICINE, my attention was arrested by Dr. B. Mosby Smith's article entitled "Telepathy."

The definition, as given in the dictionary, of hallucination as arising out of disorders of the nervous system, is substantially correct; but, of course, it is too general, broad and inclusive to furnish any ideas as to what the process involves or what has really happened or is transpiring in the subject afflicted. That there are thought-waves from the brain of another mind, may be conceded, if you will allow the existence of a dual mentality; or, if you prefer, that the mind has a dual functioning faculty. For convenience and for want of better terms, this may be classified as *objective* and *subjective minds*. However, I prefer to consider them as two distinct entities having interdependencies of one another.

Doubtless, you are aware that the objective mind of an individual is that which is capable of education, reason and volition, and by which, during our conscious hours, our actions, manners, deductions, etc., are governed, the subjective being in abatement. Those faculties known as instinctive and intuitive are solely properties of the subjective mind in

their expressions suggestively governed by the objective mind, liberated from this normal condition, as in the case of hypnotic influence.

The objective mind having been exhausted and no longer influential, leaves the subjective open to the influence of the hypnotist's suggestion, which it religiously obeys, as though it were receiving its impulses from its own objective control. That in such conditions, under a malicious or unscrupulous control, one could be influenced to commit a crime, is not in the least debatable. But, before our subject could be utilized for any purpose, either experimentally, therapeutically or maliciously; it is absolutely necessary that he be brought under the influence of the hypnotist. This would be impossible of accomplishment through the means of telepathy, for the reason that telepathy is solely a property of the subjective mind and can be actuated only through subjective consciousness.

Therefore, for like reason, hallucinations of an individual can not be attributed to an influence which is neither potent nor operative. In other words, the experimenter's mind could not actuate hallucinations in the subject's mind while the subject's mentality remained in equilibrium and under the suggestive influence of its own objective control. The operator would be attempting to manipulate a subjective psychic phenomenon not liberated from its objective influence, which is impossible, by telepathy. In the state of hypnosis, however, a different condition pertains which is entirely foreign to telepathy.

A more fitting definition of hallucinations would be, the ramifications and expressions of the subjective mind, deprived of the logical influence of the objective and reasoning intelligence.

Regarding communications claimed to have been received from the spiritual sphere by noted men and others, these are in all probability the result of autosuggestion and may have a telepathic relationship: a misinterpreted psychic phenomenon. Ignorance of psychic laws has placed gods upon the throne of heaven possessing all the frailties, weaknesses and passions of mankind. In the world's intellectual infancy, all phenomena of nature were of necessity grossly misinterpreted. Science, however, has revealed much truth concerning the laws of the material universe. It has removed physical nature from the domain of the supernatural. Spiritual science has yet to be formulated and brought within the realm of induction.

It is not my purpose to enter the prolific field of discussion which these questions present. I wish, however, briefly to touch upon what seem to me to be the salient features of your query.

As you have already mentioned, these psychics are hypochondriac and mentally ill. You will find this to be the case, although neither you nor I nor they may be cognizant of the fact.

The salient feature of the psychic career of Moses consists in his supposed communication with God. His conception of the attributes of the Deity was necessarily limited by the prevalent belief of his people and the tradition of his ancestry. He subjectively saw the vision and he subjectively heard the voice. His education and habits of thought produced the autosuggestion that it was the voice of God and, true to the universal law of suggestion, it was (to him) the voice of God. The same hypothesis applies with equal force to the intercourse of God with the prophets and seers, from the days of Abraham to the advent of Jesus of Nazareth.

It needs no argument to convince the intelligent reader of the absurdity involved in the supposition that finite Moses was able by argument to convince of wrong doing a God of infinite intelligence, mercy, wisdom, goodness and power, and cause him to repent of his evil intentions.

The conception of God that Jesus of Nazareth evolved was not the result of verbal communication from God, after the manner of the prophets. It was the result of the fact that he was endowed with the faculty of intuitive perception of the laws of the human soul, which enabled him to speak with the authority of perfect knowledge and the exercise of his psychic powers under normal physical conditions. In Jesus, the objective and subjective faculties preserved at all times and under all conditions and circumstances an exquisitely harmonious balance. Knowing the limitations of the power of the subjective mind, its amenability to control by suggestion, he never allowed it to obtain control of the dual mental organization, and history does not record a single instance where he entered the psychic state for any purpose whatsoever.

It is simply a monstrous absurdity to suppose that, if it were possible by any means to communicate with departed souls, he deliberately neglected so wonderful an opportunity to demonstrate the truth of the essential doctrine which it was his mission to bring to light; and that it was left for the

hysterical women of the nineteenth century, aided and abetted by convulsive furniture, to teach us the Way and the Truth and the Light.

W. H. C. HATTEOTH.

Oakland, Calif.

DIAGNOSIS OF PREGNANCY

The reason that "The new series of articles on obstetrics" interests me is, that anything pertaining to obstetrics interests me, especially if the article is by an authority such as Dr. Rittenhouse. Since my earliest student days, obstetrics has had a fascination for me, I think, more than any other branch of medicine, and it still has the same attraction. I am never too tired to get out of bed and answer a call to an obstetrical case, and it gives me the greatest satisfaction to see both mother and babe progress and, when I discharge the case, to feel that they are both in as perfect a condition as it is possible for medical skill to have them.

About six or seven years ago, I held the position of assistant obstetrician and had charge of the obstetrical clinic in a college in the West. The clinic was quite a large one and had a considerable territory to draw from. During the school year, we would handle about 800 to 1,000 obstetrical cases, all attended by the students; of course, under the guidance of the obstetrician in charge. Consequently, I had an opportunity to observe the working of the formulas I am sending you.

Since I have been in private practice, I have had occasion to use these formulas with good results. So, if others can make use of them in the same way, or wish to try them out on their own cases, I would be very glad to know just what results they get.

Some of the students to whom I have given them claimed that they could get no results, while others declared their results to be wonderful. Now, in my own cases, they have proven very successful. In those cases in which they have not given results, I was of the opinion that either the students did not mix the formulas rightly or that their technic was at fault. Whether one or the other, I should like to see what the doctors in general practice make of them and what results are received by the men who are working every day at obstetrics.

I am not claiming originality for these formulas which are known as the "Fowler-Klein Solutions". [See the end of this letter.—Ed.]

Regarding Dr. Rittenhouse's remarks as to the difficulty of determining the existency of pregnancy, I fully agree with him, especially in the early stages. Another thing is the frequent appearance, in the office, of strange young women who will tell you that their periods have stopped and they can not account for it as they have always been very regular. On your questioning them as to having gotten their feet wet or if they have taken cold, their answer is "Oh, no, Doctor." You ask them how long they are overdue and, as a rule, it is from a week to three weeks. Naturally, you grow suspicious of them.

At this time, I never attempt to make an examination of any kind or even touch them in any way. I simply listen to their tale, tell them that I am afraid they must have taken cold and give them a placebo. If they do not come around in a day or two, they are to come back and bring me a fresh specimen of urine, which they usually do.

I then make an examination of the urine and, if it is positive, I look at the mammary glands to see if the glands of Montgomery are enlarged or slightly inflamed. I then look at the abdomen to see if there is any discoloration of the *linea alba*. Of course, in a brunette, it is a little more noticeable than in a blonde. I never attempt to look for Hegar's sign or Chadwick's Sign in a woman or girl who is an entire stranger to me, for, as Dr. Rittenhouse so aptly warns, if your diagnosis is positive and you tell the patient that it is your belief that she is pregnant, and if anything happens afterward to cause an abortion, you stand an excellent chance of being drawn into the argument and, I assure you, it is not at all desirable to be mixed up in anything of that sort, even when you are perfectly innocent.

Other patients enter your office with the tale that they are pregnant but give a history of several miscarriages, claiming they have never done anything to cause them and that they are very desirous of having a child. You question such a woman about herself, but, usually, get nothing except that it is habitual for her to go so long and then lose the baby. The patient will seem healthy and you have to be very careful in your way of questioning her. Of course, you ask her regarding her having any discharges and as to her regularity of her menses. You think of lues (but say nothing to the patient of your thoughts), give her a placebo and ask her to return in a day or so with a fresh specimen of urine. If there is lues, you will soon find

it out by the examination of the urine by the outlined methods.

Of course, I do not say or claim that these tests are infallible or that they are positive every time. But, in my experience, they have proved good enough that I give them a trial. If your examination proves positive, you are able to institute treatment according to the requirements of the case.

Walker-Klein Solution

Test for Pregnancy, No. 1

- (1) 0.35 CuSO_4 (7 decigrams: 100Cc water)
 (2) 10% NaOH (10 parts : 100Cc ")

Technic:— 2Cc Urine
 2Cc No. 1—reagent

Add 1Cc No. 2 "

Reaction: Positive steel blue, in a reflected light.

Test for Pregnancy, No. 2

- 1 Gm FeSO_4
 2Cc H_2O (Distilled)
 15Cc H_2O_2 , 3%
 15Cc Glycerine (C. P.)

Technic:— 4Cc Urine (Fresh)
 2Cc Reagent

Add 1Cc HCl (Strong)

Reaction:— Positive, Canary yellow
 Negative, Grayish brown

Test for Syphilis

- 1 Gm Iodine (Crystals)
 100Cc CCl_4 (If not obtainable, use CHCl_3)

Technic:— 6Cc Urine (Fresh)
 1Cc Reagent

(Shake)

Reaction:— Positive, Pink
 Negative, White

WILLIAM F. X. DIERKES,

Westfield, Mass.

MEDICAL TRAINING

Several times, last year, requests were made for expressions of opinion, on the part of your readers, on various subjects. I did not reply to any of these, partly from a desire to go on sponging on the splendid efforts of a good many of the doctors, who are just plain honest-to-goodness physicians, and the other reason, because I did not feel the keen interest that I do in the things I am going to say to you personally. First, the varied nature of CLINICAL MEDICINE in being literary, social, economic as well as medical. That is truly new and helpful as it makes the journal a

medium that, to one isolated as I am, offers a chance to forget the worries and cares and soar with the wings of the eagle back to rest and peace.

Recently, I have thought so keenly over my own problem of self advancement, that I have made three trips for post-graduate study; each time with profit, and the last especially so. So that, as to the problem of medical training or education, it has been made of first importance. I have not paid much attention to the work done in medical colleges, but from observations on these visits to eastern centers and from talks with students, I am led to question whether the course in medicine, on an average, is as good as it was in 1895 when I graduated.

As to the post-graduate course—to me, it was very unsatisfactory, in several points. First, I did not know what I needed. Then, I did not know where I could get exactly what I did need. I am now convinced that, what I did not need was, more talk or lectures. What I actually needed was, to be shown what, and then to be taught how to do it. To my mind, only two men of all the hundreds who were doing work were qualified to do skillful work, and these were the first assistants to one of the most famous doctors in a great city. My opinion is, that your average physician gets enough wind at the county, state and national societies, but he does need practical demonstration in the laboratory and at the bed side. The hospital intern gets this all right—if rushing about, hurried from morning to morning through the whole time he serves, is a real training. I wonder how many really know that they know what they see, and what to do for it.

I am beginning to be suspicious of the superior knowledge of men who hide a bit of sense behind much of words of vague, indefinite, uncertain things. A case either is or is not scarlet fever and it can be definitely stated why. Or, then, a plain confession of ignorance is permissible. All should be told simply, plainly, and as briefly as possible.

I read all I can, and try to squander no time. But, I am going blind in going over the thousands upon thousands of senseless words. Oh, for some great men who can be content to remain unknown rather than steal so much of our precious time and ruin our eyes!

Please remember that I am giving you my opinion after what I have seen, and this only in a very limited way. On the whole, though, there is a desire to be fair. Can you hon-

estly blame me, or all the other honest men in the common ranks, if we have a growing disrespect and suspicion of the men in power who are directing the kind of education we have received in the past—the sort we get now and the stuff that will be forced upon the men of the future? In a sense, the medical journals must fearlessly champion our cause. My mind has never been able to free itself from the pitiful letter, that doctor wrote from Tennessee touching the fate of his sons. To my mind, his own letter was the key to the whole thing. That is, the wish that his sons and others like them somehow might get a simple, plain training, for as long a time as they wished and then be permitted to do just that work that they were qualified to do.

There is no problem so vital to medical men, today, as this one of training. But, remember, my dear doctor, that the man in Tennessee, his sons and all of us know the real teacher, love and honor him, just as men always have done and always will continue to do. State boards may be changed or purged; schools live or die; we shall be plagued with quacks and, to my way of thinking, some of these are in power in high places.

I think that your work on the Journal is constructive along some lines, and that you are using keen judgment in the things you say. What I have said to you may add to your cares, but, it about expresses my exact feelings on this thing.

J. C.

....., Kansas.

THE DOCTOR'S BUSINESS METHODS

Presumably it would shock the medical profession if it were suggested to them that they carry "receipt slips" for service, as rendered, every time they go to see a patient or every time the patient calls for consultation at the office and does not come across with the real money.

When I started out in this line of business, I first consulted old Mr. Smith who was, at that time, at the head of the ——— Battery and Optical Company. When I said that I was going to sell for cash and that I was going to collect cash, he threw both hands in the air and said, it could not be done.

I knew that they were always in hot water and that they were unable to take advantage of a 5-percent, 15-day cash discount offered by the medical journals for advertising, and did not purpose to be in the same boat.

What our business is today, has all come

from the inside, without outside capital, just by attending properly to collections and disbursements and knowing how to say No!, positively, when salesmen wanted to sell us advertising space, telling us that they would give us six months or more time to pay for it; and never advertising unless I knew that we had the money beforehand, never buying anything unless we knew where the money was going to come from; and last, but not least, by collecting just as promptly as we delivered the goods.

Frankly, I have no patience with such a loose system of collections as most doctors practice and are taught to practice, leaving, when they die, several ledgers full of uncollectable accounts by way of estate.

I am convinced, if my suggestions were carried out, it would put the doctors' business on a prosperous basis, always remembering that "a bird in hand is worth two in the bush."

Equally, it is a rotten business to charge the one who comes and pays cash the full price of every visit, and "knock off" a tidy sum for the one who pays once in a great while.

Will you pardon these notes containing some of my own thoughts, that came to me when I was traveling and interviewing doctors? Frequent explanations for refusing to purchase were:

"I expect to buy some equipment when I get something out of that

"Tungsten mine"

"Isle of Pines Venture"

"Oil Well"

"Farm I have bought"——

Now, just why should that doctor put the money he has made, in a business he knows or is supposed to know, into the hands of some one whom he does not know but who promises him large returns? Is it because he has no confidence in his own ability, in his own business? Is it, possibly, that he does not believe in it after ten or twenty years' experience and will, therefore, not invest in the necessary machinery to put it on a bigger basis?

If I want to be successful in my business, I must obtain machinery and material and skilled assistants. That doctor, if he were to get something besides a desk, a couple of chairs, a few absolutely dire necessities, and a waiting room, would he not be more successful?

If I, in my business, as soon as I earned a little money, would pull it out and let some-

body else use it in his venture, if, therefore, I could not buy anything for my business, then my business would remain small, I would not have the "wherewith" to let anybody know that I am on the map.

This other doctor I just called on says, he will buy some more equipment later on. Just now, he wants the best radio set, that can be had. The radio will not pay for the other apparatus he needs, but that apparatus would help pay for the radio and help him to pay cash for it.

Collections are poor. Why so, in a town where there is plenty of work which is being paid for weekly? The piano salesman, the vacuum cleaner salesman, the automobile salesman, they and about six more are not saying that collections are poor!

Those well-dressed ladies in the doctor's waiting room do not look poor; their husbands collect every week. Is it unethical for the doctor to collect?

Here in the country, in a small town, there are three doctors associated together. Those farm patients haven't got cash, but they have lots of farm produce.

These doctors collect, here a pig, there a hog, a calf, a heifer, some corn, oats, wheat, hay, etc. They have a man to feed this variegated lot, fatten it for the market; then they get cash. They have cash and, when I ask the banker in the town, if he will take their notes, he says he will.

Why does this same lady, who visits the doctor without paying, pay the cosmetician, the hairdresser, every time she goes to them? Why is the chiropractor's business on a sounder financial basis? Yes? Then, why not teach the doctor to charge for something more definite than a "visit"? Who cares to pay out cold cash for a "visit"?

When a doctor comes to buy an apparatus from us, it is usually up to us to ask him if he wants to pay cash or on time. Operations, as a rule, are arranged and paid for in cash or notes beforehand.

When we get a call to send an expert to locate some trouble, he takes a printed form along which the customer signs, showing that he has called for the service and agreeing to pay for it at so much per hour. When the expert is done, he marks down what he did on the same slip, also the time spent and the amount due, and the customer signs it again. We have no trouble in collecting it and the doctor, if he did not want to collect cash every time he calls or gets a call, could have such a service slip for the patient or

his guardian to sign. Turn those slips into his bank for collection at the end of the month, and they will be collectable just as much as those of the auto or player-piano salesman.

WILLIAM MEYER.

Chicago, Ill.

WOMEN PHYSICIANS PHYSIOLOGIC VS. PATHOLOGIC OBSTETRICS

Referring to Problem No. 14, in the Surgical Seminar, I am sorry to have to offer any adverse criticism of Colonel Blech's comment; but, it seems to me that he has been just a little bit hard on the woman-physician who erred in her diagnosis and treatment of the case. Would he have shown such animus, had the physician been a man? Granted, it was a piece of careless work. But, how frequently are such snap diagnoses and similar mistakes in treatment made by mere men. Why then, Colonel, go out of your way to take a shy at female medical practitioners? Mind, you, I am not, in general, in favor of women entering the medical profession, and I hold no brief for the sex in this case. Still, I must say, most of those with whom I have come in contact compare very favorably with the general run of medical men; and I have known some who were on a par with the leaders of our profession.

It will not do here to apply the words of Virgil, "*ab uno disce omnes*." (From one, you may judge them all.) This particular medico made a mistake: Let it go at that.

While I am in the critical mood, I would also like to offer a few remarks suggested by the article dealing with Dr. Philbrick's opinion on "The Influence of Fear in Difficult Labor," in the March Number of the Journal, in connection with Dr. Blech's remarks on childbirth, in the closing paragraphs of his comment on Problem No. 14.

It would appear that it has become the fashion now to regard gestation and parturition as belonging to the domain of pathology, and that modern civilization has so changed women that they are unable to carry out these primitive physiological functions unaided. While this may be true to some extent, has the pendulum not swung too far to the other extreme? The pregnant woman is regarded as being in a critical condition from which she may emerge in safety under careful supervision, but with the outcome at least doubtful; while parturition is at all times viewed as a

surgical procedure, to be surrounded with the halo of the operating room.

Childbirth is as much a physiological process as is defecation and, probably, among primitive peoples, is attended with little greater discomfort. Unlike other biological functions, it is accompanied by more or less pain. The two fundamental functions of all living things are, nutrition and reproduction; and, as we ascend in the scale of evolution, the reproductive function seems to become more complex. The simple fission of an ameba, or the budding of a polyp, we may suppose, is unattended by any non-pleasurable sensation; while some higher forms, when they have made provision for the continuation of the species, at once perish. In the mammalia, the parturient act is always attended with more or less pain. "In sorrow shalt thou bring forth children" may or may not be a penal sentence, but it is one of the conditions of life. Yet, as Holy Writ puts it, "A woman when she is in travail hath sorrow because her hour is come; but as soon as she is delivered of the child, she remembereth no more the anguish, for joy that a man is born into the world."

What I urge, therefore, is that we practice no "meddlesome midwifery" and give nature a chance to accomplish her crowning act in the drama of life. Let us have fewer instrumental deliveries, fewer Cæsarian sections, fewer needless operative procedures. The argument that I have sometimes heard for the use of forceps, "shorten the time and double the fee," is unworthy of any conscientious obstetrician. If a policy of 'watchful waiting' is justifiable in any place, surely it is in the lying-in-room; and, instead of allowing the patient to concentrate her thoughts on the "anguish," she should be encouraged to anticipate the "joy."

I fully agree with Dr. Philbrick, that hospitalization in obstetrics is wrong in principle and disastrous in practice. By no means, of course, should the condition of pregnancy be ignored or its culmination in normal labor be left to chance. The duty of the medical man is, by wise and timely advice and instruction, to guide his patient along a safe, smooth road during the whole period of gestation, so that, in the supreme hour, nature will not be thwarted in her beneficent purpose by any preventable condition; taking for his motto, "*Nil nocere.*"

GEO. ACHESON.

Kingston, N. B.

UNITED STATES CIVIL SERVICE EXAMINATION

The United States Civil Service Commission announces the following open competitive examination:

Physiotherapy Aide

Physiotherapy Pupil Aide

The examinations will be held throughout the country on May 7 and June 18. They are to fill vacancies in the Public Health Service at entrance salaries ranging from \$720 to \$960 a year plus the increase of \$20 a month and furnished quarters, subsistence, and laundry free of cost; and in the United States Veterans' Bureau at entrance salaries ranging from \$1,600 to \$2,500 a year for physiotherapy aide, and from \$1,000 to \$1,400 a year for physiotherapy pupil aide.

The duties of physiotherapy aides consist of administering physiotherapy in its several branches—massage, electrotherapy, hydrotherapy, mechanotherapy, thermotherapy; active, passive, resistive, and assistive exercises and remedial gymnastics; keeping daily record of the work and progress of each and every patient coming under direction and treatment; and making the required reports of the activities of the reconstruction work in physiotherapy.

The duties of physiotherapy pupil aides are the same as those for physiotherapy aides, except that they are pupils under the supervision and instruction of the chief aide in all the work above mentioned.

Competitors will be rated on mental tests, practical questions, and education, training, and experience.

Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or the secretary of the board of U. S. civil service examiners at the post office or customhouse in any city.

PLAUT RESEARCH FUND

Dr. Edward Plaut, president of Lehn & Fink, Inc., New York, has presented the Harriman Research Laboratory with the sum of \$3,000 for the year 1924, to be known as the "Plaut Research Fund for Studies in Internal Medicine." This fund is to aid in the investigation of the effects of certain therapeutic agents, especially the endocrine glands. Dr. K. G. Falk has been placed in charge of this work by Dr. W. G. Lyle, director of the Harriman Research Laboratory.

WHY DOES CRIME PREVAIL?

[Soon after the publication of the December (1923) issue of *CLINICAL MEDICINE*, Dr. A. S. Thompson, of Havelock, Ontario, Canada, addressed a letter to our late associate, Dr. Rittenhouse, offering a possible answer to the question which he had put, in his department, in that issue. For various reasons, Dr. Thompson's communication was laid aside and has just now come to our attention again. His argument possesses some points that are of value, and we take much pleasure in publishing the letter of our Canadian colleague in the following.—Ed.]

Dear Doctor:

I am interested in your article, "Why Does Crime Prevail?" published in the December number of *CLINICAL MEDICINE*. So much so that I venture to suggest a possible reason, namely—The antiquated system of judicial procedure obtaining in the United States.

The criminal procedure of Great Britain was based upon the legal fiction—a survival of the feudal system—that the King was the prosecutor, and, to prevent any adverse prejudice to the defendant's interest arising from this, it was enacted that each case was to be tried "by due process of law"—which meant that an appeal was allowed from the decision of every inferior court to the next higher, until the highest court, the throne, was reached, before finality was achieved.

Although this had the appearance of impartial justice, in practice it worked out the reverse. The poor could not meet the cost of appealing, while to the rich it offered no barrier if the point at issue warranted the expense. In criminal cases, such delay increased the chance of escape from penalty. The public interested flagged, witnesses died, disappeared, forgot or were bought over, so that at the end of these appeals criminals in many instances were discharged for lack of evidence. Further, as every judge knew that his decision might be appealed from, he became more or less careless, improper evidence was admitted, leading to lax habits, etc., while the time and expense to both litigants and country became ruinous and demanded drastic reform.

This legal procedure was transplanted to the early English Colonies in America and is in essence, today, the legal procedure of the United States of America.

Somewhat less than a century ago, Great Britain amended her obsolete judicial ma-

chinery by introducing a few changes of a radical nature. No appeal was allowed from the primary trial unless it could be shown that some substantial miscarriage of justice had taken place, either from the admission of improper evidence or the omission of important evidence which would, perhaps, have changed the verdict, and then only two appeals were allowed. One to the supreme court and the final one to the foot of the throne.

Note net results: Presiding judges were careful to see that no grounds for overruling their decision should occur. Justice was administered promptly at minimum cost; celerity, certainty and finality achieved. It is noteworthy that, since this reform was inaugurated, only two or three appeals have been carried past the supreme court.

As human nature is the same the world over, might it not be possible that a like reform of judicial procedure by the U. S. would bring similar happy results there also?

[In submitting the manuscript of his little article on the subject of crime, Dr. A. S. Thompson refers to another important feature of British and Canadian custom which, undoubtedly, is of importance, namely: that judges are appointed for life and can only be removed for grave cause. With us, in the United States, the elective feature leads to an impairment of the independence of the Bench. Naturally, a man once elected wishes to have his term of office extended. This is the "gift of friends" and human nature will infallibly show friendship for friends rather than to opponents, so that, along with the changes noted in judicial procedure, it might be worth considering a change in the method of elevating men to the judgeship.—Ed.]

THE LEPROSY COLONY AT CARVILLE, LA.

Referring to the editorial printed on p. 221 of *CLINICAL MEDICINE* for April, Dr. John Asa Gibbons, Mitchell, Indiana, urges steps being taken to appropriate the necessary funds for enlarging and properly maintaining the Leprosy Colony at Carville, Louisiana, so that all lepers in the country can be taken care of properly.

Doctor Gibbons quite truly says that this is a very important matter and that everybody should get busy taking it up with our representatives in Congress, both in the House and in the Senate.

We agree with Doctor Gibbons. Recent observations have shown that leprosy is curable under certain conditions. The U. S.

Public Service has accomplished wonderful results in this respect and the benefits of its success should be available to every victim of this dreaded disease, through the direct agency of the Public Health Service. By all means, let us get in touch with our Washington representatives and urge upon them the necessity of action.

"HOW DOES HE DO IT?"

In the twenty-three years of my active participation in Medicine, as a general practitioner, I have heard the phrase, "How does he do it?" so often that it seems to me it would be interesting to analyze the subject and see whether its origin is supported by fact.

If you who read this will reminisce, you will recall that on the majority of occasions, when you were spending a few idle moments with one or more brother-practitioners, you and he, or they, said about some one—"How does he do it?"

I am also interested in "How does he do it?" Nor do I expect to solve the problem in this short article; but hope to arouse a beneficial interest.

In every community, there is a man or there are some men whom we, the average plodders, look at with wonder and, sometimes, envy. I say "envy," although I think that it is not envy so much as self-pity.

However, there are men whose material success is proportionately greater than their ability.

In our profession, we must fall into one of two classes:—the scientific or the practical. The first class includes men and women interested purely in scientific research, whose labor is its own reward.—Those belonging in the second class capitalize or profit by applying the thought and work of the first in a practical way and receive for it a handsome honorarium in money and a large clientele.

We again come to the beginning—"How Does He Do It?" I must admit that there are a number of avenues to the desired goal, but I believe personality and superior knowledge to be the two easiest roads by which to travel to the destination we all desire. Personality is difficult to analyze. Besides, we are not always able to recognize it in our competitors. But, that again is hardly fair to them, because we are probably more or less biased.

Honesty compels me to admit that envy is a part and parcel of us all, no matter how we may deny it.

Personality, to my mind, is the big thing in

the practical application of our profession, and by "Personality" I mean, not only a firm hand clasp, a pleasant smile, an appropriate word, but, what is more, the inexplorable something that makes one feel, "here is a man who is going to save me." He radiates strength, he creates confidence, and even his failures are victories, because everyone will say "No one could have done better." That is Personality.

But—there is always a "but" to jar our meditation and upset our tranquillity, and this is not without its "But." Personality is one of those rare gifts that one cannot have for the asking or even by purchase. Still, a poor personality can be improved, and I would suggest that a little introspection might be beneficial, as there are a number of things one often does that are harmful, and they might be minor peculiarities of personality which could be eliminated; when the results would repay the effort many times.

To digress a moment,—Isn't it strange how easy it is to criticize, and how difficult it is to accept friendly criticism, even though it is made without malice? I have a friend who says, "Now, I want you to tell me the truth." And, when I tell him the truth, does he profit by it?—No, he pouts, even when my criticism is the friendliest, and made only because I love him.

Point One—summarizing, as George Ade would put it; if your personality is below par, but if you can make yourself big enough or if you are big enough to profit by criticism, you have traversed some miles on the road to success.

I should probably have mentioned earlier that the preceding and after-coming remarks refer only to the men who, unheralded and unsung, have to dig it up from the soil, as it were, and not to those whose fame has been built on department-store lines, by fathers, grandfathers, etc.

We now come to the last and, probably, the most important phase, the one which creates no envy, demands and commands respect, and the one which is in reach of most of us, if we are willing to pay the price.

As eternal vigilance is the price of safety, so long and faithful application is the price of success along the line of superior knowledge. To compromise with wrong, is weakening to the moral fabric. To allow oneself to be satisfied with the present status of affairs, to allow oneself to stand still, is compromising one's future, weakening one's capacity for work, and having one unjustly asked "How does he do it?"

Since the aim and desire of every man embarking on his Life's work is, to have a large and satisfied clientele and the emoluments that go with it—position, respect, and a competency for one's family—it behooves most of us to not only wonder "how he does it" but to learn from experience and to reap some of the harvest that is our due.

I have talked with many physicians, young and old, as the years have rolled on, and the dominant thing in their mind has been the other fellow's success.

I have seen this from many angles and, as for myself, I can truthfully say that, whenever the thought entered my mind, I was free from envy, albeit sorry for myself to have missed the something which was lacking. However, at a late day: "Eureka, I have found it." Now I feel that it is too good to keep. I want to tell it to you, I want to give it to you, because I am giving you something that will bring you contentment, and me happiness to have been able to contribute to your welfare.

1.—Develop your personality to the extent of eliminating the traits harmful to yourself.

2.—Strive, ever strive and work, to keep abreast of the times. Strive to excel your neighbor in that part of your work that you are most interested in.

Your profession is the noblest of all, barring none. You stand ready to help and relieve suffering and, in a crisis, you have never wavered nor thought of reward. By close application in the hum-drum, every-day life, which takes more courage than marching to battle with fife and drum and banner flying, your reward will come, and you won't have to ask—"How does he do it?"

ALEXANDER A. BROWN,

San Antonio, Texas.

MANAGEMENT OF ABORTION

In March 29 issue of *The Journal A. M. A.*, there is an article on the management of abortion. Obviously, we all agree with the fundamental argument, but I wish to relate for your judgment two cases of abortion and my treatment, and incidentally show a few of the disadvantages of country practice that would trouble us if we always had to follow the dicta of our confrères of the city.

I was called, one night, to go 15 miles south of town and up in the foothills or the range to a case of inevitable abortion, at 2½ months. The car took me over halfway and then a team drove me through drifts, the last five miles. The patient had aborted twice in the

past year and the treatment in each case has been similar. Ether given by myself and continued by the husband, quick dilatation and removal of secundines by placental forceps, followed by packing for an hour with gauze wet with tincture of iodine full strength. I made no return trip. There was no elevation of temperature. Full recovery.

The second case was also inevitable, patient having had a severe hemorrhage during the day. There was backache, some flow, but no pains. Gave three hypodermics of pituitrin, ½ Cc. each, with no results in producing pains. Patient was five months pregnant and it looked like a partial placenta previa. I decided to etherize and deliver. The dilatation was a hard task and not complete at any time. Head presented, but turned so as to make me grasp a foot which promptly tore off. The other leg followed, and then the body, piecemeal. The head escaped free and took some manipulation to get out. The fetus was macerated and had died a few days before, probably. The placenta was adherent in part, just above the edge of the os. Had some free hemorrhage for a few minutes. Packed for six hours with gauze and iodine. Not a degree of temperature. Quick convalescence.

In these cases, there was no sepsis to start with, but I should treat even a septic case similarly, with the least possible manipulation. Iodine is my sheet anchor in all cases of abortion and is used as a vaginal swab in every case of full-term pregnancy.

I submitted the history of these cases to three good surgeons, and their comment was that they did not have the nerve to follow my excellent example.

There is no hospital here. I have to drive fifty miles, two hours, to one of the best hospitals in Colorado. Frequently, I have taken operative cases at night for quick operation and have had the best service willingly given at all unseemly hours. In the last two weeks, I have taken five patients down for operation. All are doing well, even one with ruptured appendix and general peritonitis.

The secret in these pus cases is immediate operation with free incision and adequate drainage, and little ether.

DR. R. J. SMITH.

Westcliffe, Colo.

[The article to which Doctor Smith refers will be found on p. 1021 of the issue of *The Journal A. M. A.* for March 29. The author, Dr. Onslow A. Gordon, Jr., describes the management of inevitable abortion very ex-

cellently—as it should be followed out if conditions were propitious. He arrives at the conclusion that all cases of abortion should be treated conservatively until this method has definitely failed. Failure will occur in less than four percent of the cases. Doctor Gordon finds that mortality and morbidity in abortion cases are in direct ratio with the degree of intrauterine intervention. He claims that curettage in abortion changes many aseptic into septic cases and, naturally, declares it to be often actually harmful. Even in septic cases, he believes conservative treatment to be indicated.

The management of so serious a condition as abortion is one to which the general practitioner necessarily has to devote much attention. In ordinary practice among people with limited means, also out in the country, in the mountains, where you have to drive miles before reaching a hospital, the physician must resort to methods and technics that would terrify many city physicians. Doctor Smith's description of his procedures is convincing insofar as his results are all that could be desired. Still, we must confess that swabbing of the uterine cavity with full-strength tincture of iodine would cause us some decided apprehension and we would feel very uncomfortable in the next three days, watching that patient or waiting constantly for telephone messages.

The fact remains that the country doctor, the general practitioner away from the city advantages, can preserve the health and save life just as well as his more favored colleague.—Ed.]

LOCAL URETHRAL ANESTHETICS

Your discussion (March issue) of "The Problem of Local Urethral Anesthetics" suggests the possible employment of Anesthesin. It is soluble in warmed olive or wesson oil, at least to a 10 percent strength. It is relatively nontoxic. As a benzoate, it is probably antiseptic or even germicidal. Its 10 percent solution in oil is fairly anesthetic to mucous membranes, sufficiently so to abolish 90 percent of the discomfort involved in the passage of urethral instruments. Probably a 5-percent solution would do for most cases. I am not a urologist and consequently make this suggestion to my urological brethren with some trepidation. But, anesthesin may be worth trying.

HERBERT CORYN.

Point Loma, Calif.

A CHAT ABOUT PRACTICE

I am just now reading the January (1924) Journal and am always glad when I get the chance to do so. I enjoy Dr. Bryce's remarks; they are interesting and one cannot help enjoying them. I have learned a lot from his remarks and can agree with him in everything he has written.

Take the chiropractors. They have an office girl who sits there and tells you, the first six treatments will cost \$10.00. She gets the ten (or you do not see the "doctor") and gives you a card which she punches each time you come; the next time you come, it is five dollars, and so on. And they always get the money first.

People like to sting the doctor and the doctors like to be stung. I have been in practice over eleven years and I do not have anyone owing me on my books over \$400. This \$400 represents those who come, get examined, and then say, they will pay next Saturday. That Saturday never comes. Such accounts we cannot avoid.

No business man who knows business would sell a man a bill and, after nonpayment for six months, again sell this man another bill. He would say, pay first; and then he would usually ask them to pay for the second order before it is shipped. I do the same. If people want the doctor to treat them, they must pay. Do not be afraid to offend any one. If they feel offended, let them go somewhere else. You will get better ones in their place. The more strict you are, the better they like it.

Dr. Dunn's reference to examination of patients. Each physician can make an outline himself. I have one, typewritten and posted on a wall near my desk in a frame, and if I take the history and look at the list of questions, I cannot overlook anything. Start first with the general history, such as name, etc. Always know where they work or where their husbands work. This is for your bills. Then you have the head, ears, eyes, face, etc. Each man can easily figure out a plan and have it typewritten and framed.

I do a lot of "chronic" work and must, as Dr. Bryce said, go over the patient carefully. I agree fully that, if you have a dozen favorites, it pays to make them up yourself in gallon jugs and hand them out. They must come back to you for more and not go to the drug store and have a prescription renewed, even against your explicit order.

I enjoy the Seminar and am sorry that I

have as yet not joined those who take part in the discussions. But I will start one of these days. How can one help learning from such a source?

C. H. J. BARNETT.

Philadelphia, Pa.

PLEASE LOOK AGAIN, MR. EDITOR

In your article, "Would You Knock a Fellow when He Is Down?" (page 79, Feb. issue) occurs this paragraph: "Let us see; the infectious nature of puerperal fever was first called attention to by a 'Teutonic' physician." I may fairly presume that the reference is to Semmelweiss, who is often given that credit. As is well known, that *Hungarian* physician was born in Budapest and, serving in the Maternity Hospital of the *Austrian* capital, in 1847 awoke to the idea that puerperal fever is infectious; he reported that fact in 1849. One more look at accepted historic authorities would have further reminded you that Holmes, an American, in 1843, very ably taught that "The disease known as puerperal fever is so far contagious as to be frequently carried from patient to patient by physicians and nurses." Even at that date, Holmes laid no claim to being the first to present that idea, but freely quoted Gordon of Aberdeen (1795), and "previously to Gordon, Mr. White of Manchester," and again to Armstrong, of Sunderland, as holding similar views. Holmes cites that there is appended to the London edition of Dr. Armstrong's Essay "a letter from Mr. Gregson in which that gentleman says: ' . . . The cause of this I cannot pretend fully to explain, but I should be wanting in common liberality if I were to make any hesitation in asserting that the disease which appeared in my practice was highly contagious and communicable from one puerperal woman to another.'" Holmes cites numerous other similar opinions and corroborative case reports, among which appears the name of Denman.

Now, if Mr. Editor will kindly have one more look, he will see plainly stated, by Bass (Handerson's Edition, p. 1083) that the work of Semmelweiss was a "revival of Denman's idea of the communicability of puerperal diseases."

Finally, to save the trouble of still another look at the documents, I will quote from "An Introduction to the Practice of Midwifery" by Thomas Denman, M. D., Licentiate in Midwifery of the College of Physicians, and Honorary Member of the Royal Medical

Society at Edinburgh. I think the first edition appeared in London in 1800, but the copy before me was published by William Fessenden, Brattleborough, Vermont, in 1807. On page 499 we read: "There is another consequence of an epidemic, or even a sporadic, puerperal fever, on which it would be criminal to be silent. That is, the contagious nature of these fevers; it having been long suspected, and being now fully proved, that they may be, and often have been conveyed by midwives or nurses from one patient to another. . . . Nor should this subject remain a barren speculation, but, according to the value set upon reputation, teach those, who are engaged in the practice of midwifery, the impropriety of their attending patients in fevers and other dangerous diseases, if it can possibly be avoided; and to use every precaution that they do not carry contagion from one patient to another."

Believe me, Mr. Editor, it is with no desire to be captious that I have written this; nor yet to detract from the honor due to Semmelweiss for improving the notoriously filthy methods then prevailing in the Vienna Maternity Hospital and making his heroic fight which ended so pathetically. It is simply in the interest of a reasonable degree of accuracy in the statement of historic facts. And it is all the more necessary that Americans should insist upon this, because not all peoples have in recent years been content to claim only their just share of the honors earned in the advancement of learning and the arts.

SAMUEL W. KELLEY.

Cleveland.

[Doctor Kelley's charge of historical inaccuracy are too well supported by documentary proof than that I could dispute their correctness, even if I were inclined to do so. It goes without saying that I had in mind Doctor Holmes' merits in establishing, or at least insisting upon, the contagious nature of puerperal sepsis. For the moment, when I was writing that editorial in question, I admit that it had escaped me which one of the two, Semmelweiss or Holmes, preceded the other. True, I might have looked it up. I did not do so and am taking my punishment. As to Semmelweiss' race, the mere fact of his having been a native Hungarian does not exclude the possibility of his Teutonic descent. According to the "Britannica" (Cambridge Edition, Vol. XIII, p. 897), the German stock constituted 13.61 percent of the total popula-

[Concluded on page 354]

Let Us Play

Conducted by All of Us

THE DOCTOR GOES CAMPING

Nothing affords the average human more pleasure than exploring, whether it be a musty book shop, the busy thoroughfare of a great city, or following an elusive trail through swamps, over mountains where it may be lost up a tree in a knot hole. It's all life. Admitting that a doctor can sleep anywhere, from a standing position to a bed rail between pains, it still is a well-known fact that no human brought up at "the front" can secure a good night's rest, anyway for the first thirty days, with a stone pile for a bed a stump for the pillow. These conditions are for old-timers and require practice. One must have a good bed in the dry if one is to feel refreshed in the morning.

Two persons can go anywhere in a Ford roadster, but they must take cots and a tent, clear away the afterdeck and replace with a box, full width $3\frac{1}{2}$ feet high, slightly rounded at top. This is covered with water proof material and has a door at the rear. It will care for all the "plunder." The tent poles are to be of $\frac{1}{2}$ -in. galvanized iron pipe, cut in short lengths to screw together. The Ford sedan can have the bed resting on its seats, as the back of the front seat turns or folds down. There are beds for touring cars that rest on the top of the back seat. But they are no good.

The proper treatment of any touring car is: Cut back of front seat at the quarters and bottom. Fill space with hard wood. Fasten back with strong hinges. When back is in normal position, it is held there with a latch on each side. This does not mar or injure the car in any way. Should you ever be in a position where you desired to use the car as an ambulance, you have the finest. I use an enclosed Dodge. When the front back is down, it is on a level with the rear seat. To support it, we place a suit case underneath. Small bolsters fill up any uneven places. On this spring bed, there is a thick pad of comfortable. (I had a large goose-feather bed, tied or quilted and shaped to car.) Over this,

another comfortable, then the sheets, etc. Now you can undress like a Christian.

In good army stores, you will find large waterproof canvas bags. Fold bed snugly and hold in straps. Then slip into bag where it will be safe from dampness. One suit case for madam. A canvas bag for yourself. Keep the pillows at your backs.

The tent must be waterproof, yes, and light proof. The same is true for the canvas floor. Windows should open or close from inside. The flap goes over the car and fastens to wheels or to running board. This gives front support. Rear ropes care for the back. A canvas partition (with slit or egress to car) separates you from car. Now you have a dressing room lighted with the Trub-Light. (1) We like a 6-ft. square of bright woolen carpet on the floor. Makes it more homelike (with the tent I am talking about); also the stove which I shall mention later. (If you will enclose stamps, I will direct you to the right parties.) There will be no fantastic movies on the outside for the natives. You step on or from the running board right into bed. If there are children, don't forget to place a thick blanket on the cot first, to prevent cold from coming up. Also tie bed clothes at foot and perhaps on one side, so that they may remain in place. A table that has a roll-top takes up but little space. You are used to a chair with a back at home and can rest in no other position. Take folding chairs with backs.

A stove is nearly the great feature. And there is just one good one on the market. So, don't permit any one to give you that drug store song of "just as good"; for it will not be. On this stove, the wife can cook as at home. There is no smut, as it is a gas burner and two of them at that. It is also the finest of home stoves. Save your first empty quart bottle, get a ten-cent syringe hose to draw gas from the tank of car. If pleasant, the cooking is done outside. But, comes a storm, everything wet and cold, you feel as though no one likes or cares for you. Even the wife doesn't look so good. Then set the stove inside, next to the car, so that the heat will not

ruin the roof. One burner will dispel all bad thoughts. You sit in a warm, dry place, reading while mother checks up the log and asks questions. In the stove, I store a small bottle of matches, also salt, pepper, candles, knives, forks, spoons, dish towel, an ounce of tea, some sugar, some coffee, a small tin of cream, two tin-cups that nest, also a pair of pliers to take off hot things.

Other Necessities, General Rules.—Cover the tent sack well so that it will not get worn. A small sharp axe is needed; also towing line, trenching space, two canvas water buckets, lantern, chains and, above all, the pet calumet (2).

It is well to set up tent and make bed ten times, in the yard, for practice. Get all your plunder in one room, lock the door and start for the nearest camping ground to stay one night. Things will then come to your mind. Camping is no dress party; so, go suitably prepared.

Discard all those eats that you can buy on the road. You won't require a brick house and lot. However, three (why three?—En.) medicine cases are sufficient.

Carry nothing in paper bags. Use sugar sacks. Get a piece of $\frac{1}{4}$ -in. wire, sharpen one end and stick in the ground as soon as you stop. File all papers on this and burn them. Don't leave tin cans or boxes in camp. A clean camp is a blessing.

Remember the cat, and do likewise: Dig a hole and then cover it up.

Find a camping place two hours before sunset. Get off the State Road, where people have not been imposed upon so much, and ask permission of the farmer to camp near his house. If you have my cast of countenance, better send your wife. Have her remark that we use no open fires, also request the folks to come and see us. You are now all set for water, milk and eggs. Don't camp under a tree or in low ground. Do not go too early in the season, owing to insect life. Fill vacuum bottles in the morning for your noon lunch.

Madam will attend to the dishes, which should be of tin or white ware. Paper plates wash well in a small fire. Get a strip of ticking, 20 inches long, 14 wide, covered with pockets, $3\frac{1}{2}$ in. deep, run up along the center with sewing machine. That gives you a place for all small stuff. Fasten to a stick, roll up and tie. It will hang on the windshield.

Be free with camera and log book. Take some side trips before the great event. Get out the rod and reel. One quart of night-walkers (3) in a box covered with a sod is a help. Give them the cold coffee each day. Two

small double bakers will nest and cook anything from bread to crabs. A thin board, large enough to set the stove on, will assure its being level. The tent can be set up independent of car, in which case have galvanized iron pipes as before mentioned. Also have 4-inch blocks, 2 inches thick, with hole one-third through, size of uprights, so that they will not sink into wet ground or sand.

Dig out all stubs under the canvas floor, or they will come up. Blocks should be under chair legs to prevent punctures.

Give the bed half an hour of sunshine each day. Teach your wife to use the 22. Stop often and take a short walk. It will rest you. Go back as far as you can find good roads. Notice how others live. Get out and talk with them. You will be surprised at the number of good folks on earth.

At present, there are many public camping grounds, but a school yard is fine as a rule. The seashore is a wonderful place. Find an old stone dock and camp near it. Good flounder fishing at flood tide, and at low tide, you can chase the festive clam, which is almost as exciting as digging post holes. The red worms that you find are the finest bait. Should you find "hot sands" look for camel milk. A cold horn means "elk milk." (4)

Cut out all thoughts of ration schedule. Forget dehydrated food. Get an egg mailing case for 4 doz. Keep it filled. A slab of bacon. Ham, etc. Peck of potatoes, five pounds of good butter, pancake timber, all other good things will be found. Also avoid setting on the technical points said to be observed with a vacation. Provision all you can hold three times per day.

Never mind the patients. Get the habit yourself first. "Your faith being in God, your trust is well founded." Wishing all the best time ever, I am,

A. A. PIATT.

Wayland, N. Y.

GLOSSARY

The technical terms employed in the foregoing article are named with reference to Doctor Richardson's remarks as quoted in the editorial on p. 78 of *Clinical Medicine* for February. Those that may need explaining to the uninitiated are as follows:

1.—"Trub. Light" common term for "Trouble Light." A portable electric light supplied from car battery.

2.—Calumet. A pipe, and smoked, as a symbol of peace.

3.—Night-walkers mentioned are not of the variety found on dark streets of Chicago. But they are the largest species of the earth-worm, often called angle-worms, or "Fardin-Hackle." To preserve them for a long time, they are placed in a box (of tin or wood) with damp moss. The sod assists in holding moisture without which they can not live. The coffee grounds are food (for the worms).

4.—Elk and Camel Milk is only understood correctly by investing some \$500.00. Also you must have

a good friend vouch for you.

The tent mentioned is put up by the Standard Tent and Awning Co., Toledo, Ohio. The stove, Prentiss-Wabers Stove Co., Wisconsin Rapids, Wis.



Dr. M. E. Bovee, Port Huron, Mich., with a buck that he shot. We wish that he had given us a detailed description of this adventure.

THE PISGAH NATIONAL FOREST AND GAME PRESERVE

The Pisgah National Forest and Game Preserve is located in the Southern Appalachian Mountains, in Western North Carolina. According to geologists, the Appalachian Mountains are the oldest mountains in the world, whose towering peaks pierce the sky at an altitude of several thousand feet. From Mount Mitchell, 6711 feet, can be seen twenty peaks raising their heads to an altitude of 6290 feet. Forty-three peaks tower amongst the clouds at an altitude of 5600 feet.

The Pisgah National Forest and Game Preserve contains 80,600 acres, sixty thousand acres of which lie within the borders of the fair county of Transylvania.

Here are found several separate and distinct mass formations of stone, which are really

wonders of Nature. "Looking-Glass Rock" is a mountain of solid granite, one of the largest formations of the kind East of the Rockies (altitude 3600 feet, from base to top 800 feet), a sheer, perpendicular, smooth face of stone, 800 feet. During certain times, on a clear day, distant mountains can be seen reflected from this face of stone, whence the name "Looking-Glass." This wonderful mountain, standing alone, a sentinel to the valley below, is six miles in circumference.

In the Appalachian Range, towers the sublime "Whitesides Mountain," altitude 4930 feet; from base to top, 1430 feet. One side of this mountain consists of one solid, shining, perpendicular cliff, height 1430 feet from base to top, and two miles wide; hence the mountain's name "Whitesides." The circumference around this giant of nature is twelve miles.

Pen cannot describe the grandeur of these awe-inspiring mountains, their piercing peaks, circling crests, their fearful precipices and darksome gorges, the mind fails to grasp all of their beauties and sublimity and the imagination is lost in wonder as the beholder worships the mightiness of the God of Nature, the great Architect of the Heavens, and realizes the littleness of man.

All of Western North Carolina is known as "The Land of the Sky," the "Switzerland of America." But, in the Pisgah National Forest are found the scenic gems of Appalachia, the grandest and most sublime scenery to be found in Western North Carolina. A paradise of Nature, filled with rugged crests, bold peaks, water falls, rushing rivers and silvery streams, truly the Alps of America.

Here, Nature has lavished all of her most beautiful gifts for the health and happiness of man. In this "Sapphire Land" is Nature's flower garden. All of the senses are enchanted upon beholding and reveling in her springtime wealth of innumerable flowers, the trailing arbutus, violets and lilies. The flaming azalea and fragrant honeysuckle, the beautiful multicolored laurel and magnificent rhododendron. In each succeeding month, there are born new floral beauties, till the enchanting wand of the frost king converts the entire forest into a kaleidoscope of glorious colors, a crown of glory for the mystic Indian Summer.

The sportsman can here find, in the foaming streams, the speckled and rainbow trout. In this great Game Preserve roam the beautiful elk and mighty buffalo, the graceful deer and the cunning fox, the bear, wildcat and panther, "de possum en de coon."

In this great playground, in this land of the

giant oak, the towering pine and poplar, spruce and balsam, tired, nerve-shaken man can find a "back to Nature" rest, enjoy day dreams lying upon the leaf-strewn ground, beneath the odoriferous spruce and balsam, watching with charmed, dreamy, half-closed eyes, the drifting, fleecy clouds as they play hide and seek amongst the towering mountain peaks, till lulled to sleep by the ozone-laden air, the sweet zephyrs of the enchanting woodland, and the soothing music of many crystal, rippling waters.

All tourists should visit the wonderful Pisgah National Forest and Game Preserve, those from the North going to and returning from the South should make this a stopping place each spring and autumn. Travelers from the South, should make the beautiful City of Greenville, South Carolina, their objective. There, take the Geer Highway, over the Blue Ridge by way of Caesar's Head, to Brevard, N. C., a distance of about forty miles. If at Hendersonville, N. C., take the Highway No. 28, twenty miles up the beautiful French Broad Valley to Brevard, N. C.

From the Entrance, at the Monument, a beautiful road, through charming scenery, gradually rising to an altitude of five thousand feet leads through the forest to Mount Pisgah, thence a direct road to the Highway at Asheville, N. C.

C. W. HUNT.

Brevard, N. C.

YOUR VACATION

At this time of the year, most of us are making plans for the annual vacation. Every doctor should have one. More than that, every doctor is frequently asked by his patients to recommend some place where they can get the rest and recreation they want, at a place they will enjoy.

May I recommend you to write to Mr. R. P. Brown, Boy River, Minnesota. Mr. Brown is a brother-in-law of mine, and I know all about him and his little resort, which he calls Cabin Camp. I go there myself nearly every summer and, in spite of the fact that he is a relative, I can assure you that you will not find any place where, all things considered, you will get more for your money than you will there.

Cabin Camp is located on the shore of Boy Lake, and the nearest railroad station is Boy River, which is on the Soo Line, about 130 miles west and north from Duluth. It is in the heart of the lake country and off the beaten track of automobile, camping and fishing parties. However, there are good automobile roads running into this country if you desire to go by machine. It is only a few miles from Leech Lake, which is one of the biggest lakes in Minnesota. The fishing is good. In Boy Lake and surrounding lakes, there are pickerel, pike, bass and muskellonge. Boy Lake itself is one of the most beautiful lakes in northern Minnesota.

Mr. Brown has a number of new log cottages. They are comfortably furnished, and the beds are of the very best. You will not find better food or better-served food anywhere. The surroundings are delightful, the home camp and cottages being built in the natural forest. Whether you want to fish or simply to rest and enjoy outdoor life, I can assure you, you will be well pleased.

If you are interested, write to Mr. Brown at once. June and September are the best months for fishing, but there are fish enough any time through the summer. The number that can be accommodated is limited to 15 or 18 people. I shall be glad to answer any questions.

ALFRED S. BURDICK.

Chicago.

HELLO, SPRING

By E. F. Hayward

Hello, Spring! I've been a wishin'
 You'd be amblin' 'long this way;
 I'm jest itchin' to go fishin',
 Been a watchin' ev'ry day.
 Knowed you'd come along to cheer us
 Like you always used to do;
 Pitch yer tent an' camp right near us
 Fer we're mighty fond of you.
 Jes' lay off yer Easter bonnet,
 Make yerself at home right here.
 Whar's that fish-pole now, doggone it!
 That I put away las' year?
 Never mind, I'll cut a willer;
 'Taint no time to fool around.
 Ketchin' trout is sure a thriller
 Fer a real ole' fishin' hound.

The Dearborn Independent.

What Others are Doing

FUNCTIONAL ABDOMINAL DISEASE

We are frequently puzzled by patients complaining of very definite abdominal symptoms which are in nowise explainable by any physical findings that can be discovered. Palpation, x-ray examination, even laparotomy often prove disappointing, although at times ptosis is found to exist involving a greater or lesser portion of the gastrointestinal tract. As these patients perambulate from one physician to another and as they are insistent in their positive assurance of distress and in their demand for relief, we soon come to view their appearance in the office with apprehension. If our thoughts are along surgical lines, and we have exhausted our surgical resources, we are prone to put the poor devils off with a diagnosis of neurasthenia and may even tell them to their faces that their imagination is too vivid. If we are internists; we work hard attempting to find some physical cause and, failing, resort to non-specific-protein sensitization, to endocrine therapy and to various other means through which we can impress and improve the patients' psyche and thereby benefit them.

If we are in the "business of medicine," for revenue only, these patients may be an acceptable source of income or a pest, according to the lining or the slimness of their pocketbook. If we are real physicians, we devote many hours of study and thought, attempting to find and to influence the actual seat of disease, whether it be in any of the vital organs or possibly in the endocrine glands, or even merely in the patient's imagination, or habit. Some people do acquire the habit of consulting the doctor and it is a persistent habit, too.

Recently, we found an article dealing with this subject in which the author speaks of the "abdominal invalid," whom he studies in such an excellent manner that we have thought it best to reproduce the major portion of the article. This latter was read by Dr. Roy S. Finney, of Gaffney, S. C., at the Greenville meeting of the Tri-State Medical Association, Feb. 20-21, 1924, and appeared in *Southern Medicine and Surgery*, April. The author says:

"The complexity of symptoms and the variety of external influences entering into the clinical picture of the functional invalid make one hesitate to even attempt a classification. However, during a recent review and refiling of case histories, dealing with functional abdominal conditions, the author was struck with the frequency with which four particular types were encountered. To be brief, out of 205 cases studied, 150 were found to correspond more or less accurately to one of the four following types:

"First, we have the constitutionally inferior—a poorly-nourished creature with the asthenic habitus, visceroptosis, a spastic colon and a scar somewhere near McBurney's point. The blood pressure more frequently than not is found to be low, and at times one imagines he can find insufficiency. Martinet has described a syndrome which he calls hyposphysia that includes many patients of this type. The picture here is the most definite of all and is frequently seen. As Elliott says, it represents a partial failure on the part of nature in creating the individual, and here we find such morphological misadventures as Jackson's membrane, Lane's kink, cecum mobile, etc., to say nothing of the much abused floating kidney. Women are more frequently affected than men (31 out of 44 in the author's cases) and the story of their complaints may turn the historian's attention to every system of the body. In marked contrast to the verbosity of the symptoms, physical examination will elicit little except this—a distinct tenderness on deep pressure somewhere in the right lower quadrant and regardless of whether the appendix has been removed or not. It is this sign which, like the desert mirage, leads the surgeon on to an unsuccessful operation, for surgery can not be made extensive enough to refashion an organism that is defective in its entirety. It is wise never to make a diagnosis of chronic appendicitis in this type of case.

"The second type, though not as clear as the first, is nevertheless a definite one. Here nature has somewhat overdone things and we have a middle-aged person of the sthenic habitus with a high cowhorn hypertonic stomach which secretes an overabundance of acid, and a distinct tendency to vagatonia. More or less obesity is usually present together with an enormous appetite and a spastic form of constipation. The general contour of the patient may remind us of Deaver's epigram 'fair, fat and forty, belching gas—gallstones'. Among them, we often find the ulcer syndrome without being able to demonstrate ulcer, though occasionally it is strongly suspected; probably the most frequent cause of the gastric complaints is to be found in a chronic cholecystitis

with or without cholelithiasis.

"H. E. Griffiths, in his Hunterian lectures, emphasizes the fact that the gall-bladder and stomach are parts of a definite reflex nervous arc. 'Irritation of the mucous membrane of the gall-bladder causes a reflex irritability of the vagus which is most marked by its action in the stomach where an increase in the amount and acidity of the gastric juice is produced associated with a relaxation of the pylorus and regurgitation from the duodenum.' As our ability to diagnose mild forms of gall-bladder infection increases, it is probable that the ranks of so-called functional members of this group will be greatly thinned.

"A latent chronic appendicitis may also cause the gastric symptoms by means of the same reflex nervous arc. In this type of case, surgery is frequently successful in curing what was supposed to be a functional condition by removing a diseased appendix or gall-bladder.

"The third type is the most indefinite of all and serves as a sort of diagnostic waste-basket. It is composed of adults of all ages, includes both the fat and the lean and is equally frequent among men and women. (27 males to 29 females.) In all of them, careful questioning will establish a clear neurotic tendency and a habit of introspection and exaggeration. The leading symptom is gastrointestinal, but there is always a background of other complaint such as lassitude, backache, cold hands and feet, the neuroarthritic syndrome, etc. It is important for the clinician to realize that this type is rarely a constitutionally inferior and that the neurotic symptoms present may be the result of a constant drain on the vitality exerted over a long period of time by some chronic organic disease. Focal infection is always to be suspected and some remarkable recoveries may be obtained by draining an infected sinus, extracting a diseased tooth, etc. The importance of repeated and exhausting search for such foci in these patients can not be overemphasized and the profession owes Billings, Rosenow and others a debt of genuine gratitude for their valuable researches along this line.

"The fourth and last type is the unmistakable neurasthenic. Here again we may find the presenting complaint abdominal with a background of bizarre symptomatology, but careful history taking will bring to light the characteristic weakness, fatigueability and irritability of the various functions motor, sensory, psychic or visceral. According to Dercum, the appetite is usually normal or increased and thirst markedly diminished. He regards this point important in the differentiation from melancholia.

"It is usually not difficult to recognize the typical neurasthenic, though, of course, a thorough clinical and laboratory examination is indispensable. The atypical neurasthenic and victims of the mixed neuroses form the class in which the largest number of diagnostic errors are made. . . .

"The problem of treating these invalids and semi-invalids will at times tax the wisdom of a Solomon. The physician should first of all inspire confidence by the thoroughness of his

examination and then, having made a diagnosis of functional disorder, he should disregard the disease and treat the patient. This dictum of course means that no two cases can be handled exactly alike, and the successful therapist must be able to assume the role of an actor, being grave or cheerful, firm or concessive, attentive or neglectful, as the case demands. In all diseases of functional origin, psychotherapy must either directly or indirectly play an important part, and, in many cases, success depends entirely on a knowledge of this branch of therapeutics. It should begin with a firm, convincing handshake, as the patient is admitted to the examining room, and should not end until recovery has been achieved. All statements made to the patient must be definite and convincing. 'I am unable to locate any organic disease,' should be replaced by, 'You positively have no organic disease,' repeated several times with emphasis. A brief but clear explanation of the origin of symptoms is indicated. Since most neurotics are guilty of morbid introspection, they should be told to guard against this evil. Unfortunately, many find that they can no longer direct their thoughts, and, while they have been brought to realize the benignity of the symptoms, yet they can not divorce them. In these cases, the author has relied successfully upon this simple mental exercise—the patient is instructed to take his watch, a pencil and paper and see how many clear mental landscape pictures he can form in a quarter of an hour, the total number being jotted down on paper and kept for future comparison. It is surprising how much benefit may accrue from this simple expedient. Psychotherapy is, of course, most successful with neurotics and neurasthenics.

"The constitutionally inferior must be made to realize that he is incapable of leading a strenuous life and his habits must be regulated accordingly. The thin viscerotropic should have the accompanying constipation corrected and then, if possible, should be made fat. The result obtained is often far short of that desired and appendectomy is usually performed sooner or later with no benefit.

"Rest, massage, hydrotherapy and electricity are all of great value in any functional condition of the abdomen and should not be neglected. Diathermy over the liver and cecum is especially valuable when pain is conspicuous.

"The logic of gall-bladder drainage by the Lyon-Meltzer method may be questioned, but there are many cases benefited by it. There is nothing better for the class of patient who complains of 'chronic biliousness' and 'torpid liver.'

"In a series of 20 cases, the Bacillus Acidophilus milk, prepared and shipped by Lederle Antitoxin Laboratories and given at the rate of a pint and a half a day, changed the fecal flora from a proteolytic to aciduric a few days, with marked benefit in twelve cases and some benefit in all.

"Drugs are of limited value, but must be given to relieve symptoms. Belladonna, bromides, valerian and the alkalies may be used to advantage when indicated."

[We agree with Doctor Finney in virtually everything but his selection of drugs. First

and foremost, we are convinced that bromides are not only useless (with the exception of monobromated camphor) but that, often, they are actually harmful. Belladonna, best in the form of atropine sulphate, is all right. So are the valerates and the alkalies. However, there are various other things that are of equal service. Asafetida, of course, in combination with valerian and sumbul. Stomachics like nux vomica and capsicum often do excellent service. It has recently been pointed out that digitalis preparations have been used with good effect in neurasthenics showing the symptoms of the anxiety state—and this we often find in "abdominal" patients. In view of the fact that these patients are very prone to develop intestinal autointoxication, occasional courses of intestinal antiseptics are indicated. We prefer the sulphocarbolates of calcium and sodium. Preparations containing lime and phosphorus in available form also are of service to counteract an existing mineral deficiency; and we must not forget the real service to be secured from a careful administration of endocrine substances, such as adrenal and thyroid.]

ADVANTAGES OF THE "LOADING SLOT" IN RADIUM EMANATION IMPLANTATION

Joseph Muir, New York City, (*Jour. Urol.*, Mar. '24), makes the following points:

The implantation of radium emanation "seeds" in connection with cystoscopy, and otherwise, has been practiced for a period of about ten years.

The technic employed can be briefly stated as follows:

1.—The fixing of the "seed" in the point of the needle with radium.

2.—The introduction of the needle itself through the cystoscope.

3.—The implantation of the "seed" by means of the plunger.

Using the method outlined, a considerable amount of time is consumed, as the implanter had to be completely withdrawn for each implantation. Because of this, visual observation was continually interrupted and, consequently, the location of successive implantations was not only a matter of uncertainty—but the implantation of successive "seeds" in the same puncture channel was practically an impossibility. In other words, the exact distribution of "seeds," and the amount of dosage was a matter of guesswork.

All these shortcomings are obviated by the use of my flexible radium seed implanter, with the "loading slot."

Using this instrument, a large number of "seeds" may be implanted in a much shorter space of time, with less traumatism, and with few portals of entrance.

The field of implantation may be mapped out with accuracy under constant visual observation, and successive "seeds" can be imbedded in the same puncture channel, to any depth, and at any interval with mathematical accuracy.

Therefore, it is obvious that the flexible radium "seed" implanter provides the highly desirable factor of uniform distribution of radium emanation "seeds," i. e., radiation, and in addition avoids the former necessity of surface radiation. This latter supplemental radiation formerly had to be resorted to because of the possibility of maldistribution.

This technic has been used in actual practice by some of our leading urologists and its merits is very apparent after a careful reading of the vividly illustrated article in the *Journal of Urology* of March, 1924.

[Concluded from page 347]

tion in 1880. I have no information as to the relative proportion at the beginning of the last century, at the time of Semmelweiss' birth, but his name suggests that he was of German descent.

While it is freely admitted that the infectious nature of puerperal fever was *not* first called attention by a Teutonic physician, it, nevertheless, is true that this same presumably Teutonic physician was instrumental in having the fact established and, no less, that he suffered severely for his contention.—Ed.]

AN OPEN LOCATION

Our town is without a doctor, since the death of Dr. J. A. Ratt, Feb. 28th.

Perhaps you would know of a doctor who would like to locate in this town. There is a very attractive proposition here for a doctor. Hope you may be able to assist us.

WHITE ROCK DRUG CO.

White Rock, S. D.

[This looks like a very excellent opportunity.—Ed.]

Among the Books

ROST-REIMANN: "SURGICAL DISEASES"

The Pathological Physiology of Surgical Diseases. A Basis for Diagnosis and Treatment of Surgical Affections. By Professor Dr. Franz Rost. Authorized Translation by Stanley P. Reimann, M. D. With a Foreword by John B. Deaver, M. D. Philadelphia: P. Blakiston's Son & Co. 1923. Price \$6.00.

As a treatise on pathological physiology, even though it be limited to surgical diseases, this book is clearly as useful to the general practitioner as it is to the surgeon. A basis for the diagnosis (and treatment) of surgical affections evidently concerns the internist for, very often, it is he who must recognize the surgical nature of certain affections, or at least the need for surgical intervention.

Given the necessity for surgical intervention which, say, may require the removal of an organ, or of a part of an organ, it is necessary not only to know that life can be sustained even after the removal of that organ, but, it also must be determined how the organism adapts itself to the new state of affairs. In other words, when the ordinary physiological processes have been altered forcibly, it is unavoidable to investigate the manner in which these physiologically processes, which have become pathological, are now carried out.

As far as we know, this viewpoint is somewhat novel and has not hitherto been advanced so insistently. Professor Rost has done us a distinct and great service in presenting this book to the medical profession and its translation into the English language, making it available to a far wider circle of readers, can only be appreciated at its true value which is great.

WATSON: "HERNIA"

Hernia. Its Anatomy, Etiology, Symptoms, Diagnosis, Differential Diagnosis, Prognosis, and Operative Treatment. By Leigh F. Watson, M. D. Illustrated. St. Louis: C. V. Mosby Company. 1924. Price \$11.00.

Monographic treatises of hernia have always possessed some special personal interest to the Reviewer because, some thirty years ago, as it happened, he saw the beautiful work

on the same subject, by the late Dr. Henry O. Marcy, in the making. Doctor Marcy, it will be remembered, was the first American pupil of Lister and the first surgeon in this country to employ antiseptic methods in operating.

Doctor Watson's splendid treatise shows the progress that has been made in these three decades in the surgery of hernia. It illustrates the large amount of work that has been accomplished and bears witness to the author's own fruitful interest in it. The text is concise; the illustrations are numerous and beautiful and, to the student, the copious literary references appended to the individual chapters will prove highly acceptable. The book, naturally, is written for the surgeon who will find it of use.

FABER: "NOSOGRAPHY"

Nosography in Modern Internal Medicine. By Knud Faber, M. D. With an Introductory Note by Rufus Cole, M. D. With Twenty-One Full Page Portraits. New York: Paul B. Hoeber, Inc. 1923. Price \$3.75.

Here is another one of those "different" books that, every now and again, are made available to physicians delighting in the study of medical history through the disinterested intermediation of Mr. Paul Hoeber. Through a historical study, the book attempts to formulate the idea of what clinical medicine really is and, while insisting that clinical medicine is an art rather than a science, it still demonstrates conclusively that the art can not be acquired without attention to the fundamental sciences.

The text is divided in six parts as follows: Sydenham and the Nosologists; The Paris School. Anatomic Diagnosis; German Physiological Medicine; The Bacteriological Clinic; Functional Diagnosis; Constitutional Pathology and an Index of Personal Names.

FOSTER: "EXAMINATION OF PATIENTS"

The Examination of Patients. By Nellis B. Foster, M. D. Illustrated. Philadelphia: W. B. Saunders Company. 1923. Price \$3.50.

The outstanding point which Doctor Foster

makes in this book appears from the title, "The Examination of *Patients*," and not the examination of *cases*. Doctor Foster stresses the necessity of individualization, the need of finding out just exactly what and everything that is wrong with the patient. The classification of the ailment, or ailments, found comes later. First of all, it must be determined where and how the patient is ill, and why.

While, in hospital and dispensary practice, a certain degree of standardization, of schedule, or routine, work is unavoidable, and while this may even invade the private consultation room, the importance of individualization may not be lost sight of if the benefits of treatment are to be commensurate.

This, we take it, is the most impressive lesson to be learned from Doctor Foster's book, and we opine that it is in itself sufficient grounds for obtaining it, to say nothing of the other useful information afforded.

MONAGHAN: "WHAT TO EAT"

What to Eat and How to Prepare it. By Elizabeth A. Monaghan. With a Preface by Sarah Gertrude Banks, M. D. New York: George H. Doran Company. Price \$1.50.

This book is based largely on Mr. McCann's work on dietetics: "The Science of Eating," the lessons of which the author has proved in her own personal experience. It has set itself the task to afford a knowledge of what is food (as a safeguard against the numerous packages of "foodless foods" with which the market is flooded).

What elements are positively essential to the nourishment and functioning of the human body; what happens when these elements constitute a portion of the daily dietary and what happens when they do not. There are all sorts of attractive recipes.

SHARPEY-SCHAFFER: "THE ENDOCRINE ORGANS"

The Endocrine Organs. An Introduction to the Study of Internal Secretion. By Sir E. Sharpey-Schafer, LL.D., D.Sc., M.D., F.R.S. Second Edition. Illustrated. Part I. The Thyroid, the Parathyroids, and the Suprarenal Capsules. London: Longmans, Green & Co. 1924. Price \$5.00.

This is Part I of the second edition of "The Endocrine Organs" by the same author and it contains, besides a general account of the subject, special descriptions of the thyroid, parathyroids and suprarenals. Part II, which deals with the remaining organs, will appear later.

The text of the book is devoted mainly to an account of the scientific work accomplished in the study of the endocrine organs. It is not clinical, although, of course, the experimental results may be applied to clinical conditions—*nota bene* with suitable caution. For the student of endocrinology and for the physician who is interested practically in this fascinating study, the book is to be commended.

BUERGER: "CIRCULATORY DISTURBANCES"

The Circulatory Disturbances of the Extremities Including Gangrene, Vasomotor and Trophic Diseases. By Leo Buerger, M.A., M.D. Illustrated. Philadelphia: W. B. Saunders Co. 1924. Price \$8.50.

In this volume, the author attempts to assemble, analyze and interpret the multitude of facts bearing on the subjects mentioned in the title and thus to establish a correct classification of the disturbances under consideration for diagnosis and also for treatment. It is a difficult subject and the reading of the book will not prove easy. Nevertheless, from following some of the author's expositions, the Reviewer concludes that its study is to be urgently recommended to the general practitioner who is called upon so often to deal with the lesions described.

FOWLER: "TUBERCULOSIS"

Problems in Tuberculosis. Administration; Diagnosis; Employment; Settlements. By Sir James Kingston Fowler, M.D. London: Oxford Medical Publications. 1923. Price \$6.50.

This small book is of special interest to tuberculosis workers, to sanatorium physicians and settlement workers. It is in no sense a textbook of pulmonary tuberculosis, although it may be mentioned that the author has written such a separate textbook, which was reviewed in this journal a few months ago.

RUBIN: "RADIENDOCRINOLOGY"

The New Science of Radiendocrinology in its relation to Rejuvenation. Based on the Radiation Technique of Dr. Eugen Steinach of Vienna. By Herman H. Rubin, M.D. New York: Medical Science Publishing Co. 1923.

This book deals with an adaptation of the Steinach Rejuvenation treatment which makes it possible to procure the advantages of this therapy without being under the necessity of traveling to Vienna or Paris. The term radiendocrinology refers to the radiation treat-

ment of the endocrines through which these organs are stimulated to renewed activity with the result that very gratifying successes have been observed in a variety of functional and organic disorders. The treatment has been administered in diabetes mellitus, in diseases of the kidneys and the prostate, in obesity, in arteriosclerosis and in numerous other maladies and the popular conception of the Steinach treatment, which puts it on a par with Voronoff's "monkey glands," is only a negligible incidental factor.

DERCUM: "INTERNAL SECRECTIONS"

The Biology of the Secretions. The Endocrine Factor in Development, in Subnormalities, in Neoplasms and Malignancy, in Nervous and Mental Diseases and in Heredity. By Francis X. Dercum, M.D., Ph.D. Philadelphia: W. S. Saunders Company. 1924. Price \$2.75.

This is a very interesting book which may be said to be devoted to *applied* endocrinology. Aside from the concise explanations for anomalies of development through endocrine malfunction, our curiosity is aroused in the author's declaration that there may be found here the explanation of malignancy in general. Since glandular imbalances result in "under" and "overcompensations," the atrophies, hypertrophies, neoplasms, malignancies that follow may logically be referred to a definite cause. We hold that this book constitutes an important step forward in the study of many obscure disease states.

COLLINS: "THE DOCTOR LOOKS AT LITERATURE"

The Doctor Looks at Literature. Psychological Studies of Life and Letters. By Joseph Collins. New York: George H. Doran Company. 1923. Price \$3.00.

Novelists have amused themselves since olden times by describing, ridiculing and, of recent years, psychoanalyzing physicians. In this present volume, the process is reversed. A physician whose special work lies in neurology and psychiatry has taken up a number of modern authors, studying their tendencies, their views of life, the manner in which they depict what they believe life to be. The result is decidedly novel. We are surprised and astonished at the great importance that is attributed in current fiction to psychology. This tendency is not without its dangers because not everybody who is "exposed" to the study of that difficult subject will respond by "taking" it. In many instances, the novelists per-

mit their imagination to run away with them, and this is particularly the case in such "realistic" writers as Mr. D. W. Lawrence, to whom (we are glad to say) Dr. Collins pays special attention with the result that this writer, who to us is peculiarly objectionable, is put where he belongs—far down in the list.

Of course, it is readily understood that the Freudian psychology and its more recent developments formed an irresistible pabulum for the morbid imagination of those modern writers who want to find an excuse at any cost for their nasty imaginings and tendencies. Collins' explanation and criticism are satisfying to one who does not care to read books for no better reason than that they are between gaudy covers and are announced blatantly by the publishers.

However, Doctor Collins does not find solely things to criticize. He describes many authors whose works are praiseworthy and who have truly enriched belletristic literature. Some of them are not so well known and our introduction to them is appreciated on our part.

Altogether, "The Doctor Looks at Literature" offers a fascinating study that is sometimes entertaining, sometimes enlightening and always interesting.

MACLEOD & BANTING: "INSULIN"

The Antidiabetic Functions of the Pancreas and the Successful Isolation of the Antidiabetic Hormone—Insulin. By Professor J. J. R. MacLeod and Professor F. G. Banting. Series Number Two. St. Louis: C. V. Mosby Company. 1924. Price \$1.50.

This little volume contains three lectures known as the Wayne County Medical Society Beaumont Foundation Lectures, delivered at the Annual Lecture Course No. 2. They are, first, by Professor J. J. R. MacLeod: "The Pancreas in Its Relation to Digestion and Metabolism of Carbohydrates—Historical"; second, by Professor J. J. R. MacLeod: "Experimental Results from Insulin"; third, by Professor F. G. Banting: "The Experimental Work Upon Insulin. Its Use in Diabetes."

CAMMIDGE: "INSULIN"

The Insulin Treatment of Diabetes Mellitus. By P. J. Cammidge, M.D. New York: William Wood & Co. 1924. Price \$2.00.

This small book contains a summary of the employment of insulin in the treatment of diabetes mellitus and it is fitting that Doctor Cammidge, one of the early and extensive users of the remedy in Great Britain, should

have written it. While the effects of insulin in connection with the treatment of diabetes or, it should rather be said, the management of diabetic patients, are often striking and dramatic, the remedy, nevertheless, has its limitations and even its dangers so that, the author concludes, its indiscriminate use is to be strongly deprecated. It is of particular interest to find in this book a summary of the author's views and an explanation why insulin has not proved to be the "cure" for diabetes, in the ordinarily accepted sense of the word, it was at first expected to be by the public and many physicians.

BECK: "NOSE, THROAT AND EAR"

Applied Pathology in Diseases of the Nose, Throat and Ear. By Joseph C. Beck, M. D., F. A. C. S. Illustrated. St. Louis: C. V. Mosby Company. 1923. Price \$7.50.

The title of this book must prove attractive to the otolaryngologist since there is not, even to this day, an English textbook that is limited to the pathology of nose, throat and ear diseases and their borderline conditions. The author has set himself the task to produce a work on the applied pathology of these special diseases, believing that greater benefit will be derived from applying the pathological entities to etiology, symptoms, diagnosis and prognosis, thereby arriving at a rational basis for treatment, *exclusive of the strictly-surgical interventions* (italics in the text). The fact that the text is almost exclusively personal, being based on the author's personal experiences and observations, should render it all the more acceptable. The author informs us that his treatise should not be considered as a textbook. In our opinion, that is an advantage.

The text is divided logically in two parts, Part I dealing with the acute diseases of nose, pharynx, nasopharynx, larynx, trachea, ear; Part II discussing the chronic diseases encountered in these regions. It is copiously illustrated and mechanically well done.

JOSLIN: "DIABETES MELLITUS"

The Treatment of Diabetes Mellitus with Observations Based on Three Thousand Cases. By Elliott P. Joslin, M.D., M.A., Third Edition, Enlarged, Revised and Rewritten. Illustrated. Philadelphia: Lea & Febiger. 1923. Price \$8.00.

This new edition of Joslin's "Diabetes Mellitus" is of particular importance in that it differs from its predecessors by the inclusion of what is one of the most notable discoveries

of the century from the viewpoint of the physician; namely, that of Insulin. Insulin, be it remarked once more, does not cure diabetes but, nevertheless, makes it possible for the diabetic to live with his diabetes in comfort. Doctor Joslin tells us that, whereas formerly ten percent of all diabetics seen in a year died the same year, the mortality has now fallen to 6.7 percent of his 293 patients treated with Insulin.

It goes without saying that all is not yet known about this wonderful remedy; and it is equally self-evident that a great deal of the established theory and practice of diabetes mellitus may not be thrown overboard *brevia manu*, but that especially the diabetic considerations still are of outstanding importance. However, in dealing with the diabetes problem of today, we think in terms of Insulin, and for that reason it is time to acquire and study a book produced by so great an authority on the subject as is Doctor Joslin.

KNOWLES: "DISEASES OF THE SKIN"

Diseases of the Skin. By Frank Crozer Knowles, M.D. Second Edition, Thoroughly Revised. Illustrated. Philadelphia and New York. Lea & Febiger. 1923. Price \$6.50.

The last few years have brought us several new treatises on skin diseases in which it is pleasing to note a new viewpoint of the dermatologist and in which the skin disease, as an expression (partial, at least) of some systemic disturbance is considered. This viewpoint is of great importance and makes it possible to treat many of the dermatological lesions far more successfully than was formerly the case. It is true, there still remain a considerable number of lesions that are purely and solely skin affections.

Doctor Knowles' book is clearly modern in its treatment of the subject. We have enjoyed his practical suggestions in the therapy of "skin" patients.

HOW TO TAKE CARE OF THE PENCE

The man who has lately been unlucky in choosing his investments should read "Investment: A New Profession," by Henry S. Sturgis, which is to be published shortly by Macmillan. It will tell him what kind of investments to buy and what kind to avoid and what his broker should do for him. The President of the New York Stock Exchange writes the preface for the book.